DOCUMENT RESUME

ED 191 933 UD 020 796

TITLE	ESEA, Title I Evaluation Report 1978-1979.
INSTITUTION	Community School District 9, Bronx, N.Y.
PUB DATE	79
NOTE	259p.
EDRS PRICE	MF01/PC11 Plus Postage.
DESCRIPTORS	Bilingual Education; *Compensatory Education; Early Childhood Education; Elementary Education; English (Second Language); Junior High Schools; Learning Centers (Classroom); Learning Disabilities; Learning Laboratories; Mathematics Instruction; Program Descriptions; *Program Effectiveness; Program Evaluation; Reading Instruction; Remedial Mathematics; Remedial Reading; Staff Development; Summer Programs
IDENTIFIERS	*Elementary Secondary Education Act Title I; Impact Aid; New York (Bronx); *New York City Board of Education

ABSTRACT

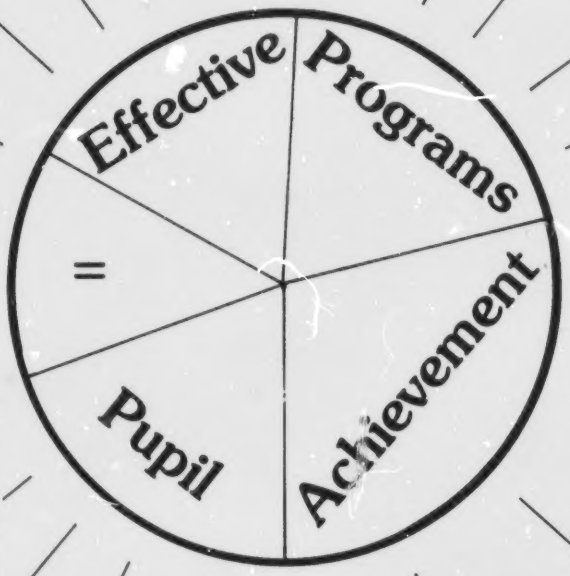
Programs undertaken by Community School District 9 in Bronx, New York, funded by Title I of the Elementary Secondary Education Act and Impact Aid, are evaluated in this report. The following programs are presented: (1) Basic Skills Center Reading Program, (2) Project Best (a bicultural/bilingual reading and math program for Spanish dominant students), (3) Bilingual Junior High School, (4) Remedial Laboratory (a diagnostic-prescriptive approach to correcting learning problems), (5) Prescription Learning: Mathematics, (6) Workshop Way (an instructional reading program for low achievers), (7) Strengthening Early Childhood, (8) Junior High Math Laboratory, (9) Assisting Students with Learning Disabilities, (10) English as a Second Language, (11) Reading and Mathematic 1979 Summer Program, and (12) Staff Development. (MK)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED191933

Community School District No. 9

Roland N. Patterson, Ed.D.



ESEA, TITLE I Evaluation Report 1978 — 1979

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
R. EDMUNDS
N.Y.C. BOARD OF ED.
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Putting it together requires the parts. understanding

VD020796

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

D'STRICT 9 COMMUNITY SCHOOL BOARD

Title I Committee

HONORABLE FRED BROWN, *Chairperson*

HONORABLE EDWARD STAN HALL, *Co-Chairperson*

COMMUNITY SCHOOL BOARD MEMBERS

HONORABLE JEROME A. GREENE.....President

HONORABLE FRED BROWN.....First Vice President

HONORABLE EDITH HICKS.....Second Vice President

HONORABLE EDWARD STAN HALL.....Secretary

HONORABLE CURTIS JOHNSON.....Treasurer

HONORABLE NICOLAS QUILES.....Financial Secretary

HONORABLE EDUARDO LAGUERRE.....Member

HONORABLE RALPH MORALES.....Member

HONORABLE CARMELO SAEZ.....Member

COMMUNITY SCHOOL DISTRICT 9
1377 Jerome Avenue
Bronx, New York 10452

1979

Function Numbers 5049-91622 Title I
5049-91623
5049-91624
5049-91625
5049-91626
5049-91627
5049-91628
5049-91629
5049-91632
5049-91633
5049-98723 Impact Aid
5001-09-01603-Summer
5049-98722

NARRATIVE EVALUATION REPORTS

OF

ESEA TITLE I

AND

IMPACT AID PROGRAMS

FINAL REPORT

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Hon. Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research and Evaluation

TITLE I COORDINATORS

Acting Director, Title I.....Beryl Dorsett

Basic Skills Center Reading Program.....Ellen Overton

Project BEST.....Sylvia Hernandez
Assistant to the Coordinator.....Ramona Mena

Bilingual Junior High School.....Jesus Barbosa

Remedial Laboratory.....Jack Billig

Prescription Learning.....Florence Greenspan

Workshop Way.....Jerome Grosser

Strengthening Early Childhood.....Miriam Sour

Junior High Math Laboratory.....Mark Fleischner

English As a Second Language.....Ruth Lowe

Staff Development.....Nilda Soto

Reading and Mathematic (RAMS) 1979
Summer Program (Administrator).Lois Desvigne
Coordinator.....Leroy Watkins

Assisting Students With Learning Disabilities.....Richard Wallin

ACKNOWLEDGEMENT

The efforts on the part of Community School District #9, to implement compensatory programs designed to address educational deficiencies as demonstrated by local pupils participating in ESEA, Title I programs, have consistently proven effective. The concept of effectiveness is to be understood as indicative of pupil achievement, and the provision of operational in-sights, as regard specific strengths and weaknesses of individual programs.

From the perspective of Pupil achievement, the several procedures of analysis used,indicated increased average test scores when pre-versus post-test results were compared. In addition, pupil achievement patterns tended to exhibit a more uniform character during post-testing than pre-testing.

Roland N. Patterson, Ed.D.
Community Superintendent

TITLE I 1978-79

EVALUATION CONSULTANT TEAM

Mr. Theodore A. Davis
Ms. Leanora Nelson
Mrs. Valerie M. Washington

And

Mary Jane Smith, Ph.D.

The assistance of the above listed evaluation consultant team and the cooperation of the District leadership including Dr. Roland N. Patterson, Community Superintendent, Berly Dorsett, Acting Director, Title I and the District Research and Evaluation staff, were invaluable in this comprehensive program evaluation.

TABLE OF CONTENTS

PROJECT	PAGE
Introduction	i
Basic Skills Center Reading Program 5049-91622	1
Project Best 5049-91623	13
Bilingual Junior High School 5049-91624	21
Remedial Laboratory 5049-91625	33
Prescription Learning: Mathematics 5049-91626	44
Workshop Way 5049-91627	50
Strengthening Early Childhood 5049-91629	59
Junior High Math Laboratory 5049-91633; 50 49-98723	67
Assisting Students with Learning Disabilities 5049-91628	73
English As A Second Language 5049-91632	81
Reading and Mathematic (RAMS) 1979 Summer Program...5049-09-01623	90
Staff Development 5049-98722	121

APPENDICES

A. RAMS Checklist
B. Staff Development Questionnaire

Function Number 5049-91622

BASIC SKILLS CENTER READING PROGRAM

FINAL REPORT

SCHOOL YEAR 1978-79

An evaluation of New York City School District educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1978-79 school year.

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research and Evaluation

Ellen Overton
Coordinator, Basic Skills Center Reading Program

AN EXECUTIVE ABSTRACT

BASIC SKILLS CENTER READING PROGRAM/AND MOUNT VERNON

T.V.Reading and Replication Program

5049 - 91622

Ellen Overton
Acting Coordinator

The Basic Skills Center is a diagnostic - prescriptive reading approach which serviced 2,625 pupils in grades 4-8 in 21 schools. In the diagnostic phase, pupils received the Individualized Criterion Reference Test (ICRT), which served as the basis of instruction along with teacher observations and recommendation. In the prescriptive phase, pupils received small group or individual instruction from teachers or para-professionals, based on previously ascertained needs. Pedagogical Methodology included an eclectic reading approach for word attack, comprehension, and work study skills. The Spalding Method was used for developing skills in phonics, speech, writing, spelling and reading. Conference services and the use of consultants were required as part of the pre-service and in-service training. One hundred and fifty pupils who participated in the Mount Vernon Program, learned reading skills through the use of T.V. Scripts from "Lucy" and "Happy Days". The achievement record shows that grades four, five, and six demonstrated an exemplary learning record for the 1978-79 academic year. Results indicate growth primarily in the lower grades as compared to the upper grades.

Function Number 5049-91622

BASIC SKILLS CENTER READING PROGRAM/AND MOUNT VERNON

T.V. Reading and Replication Program

TAX LEVY YEAR 1978-79

ESEA-TITLE I

EVALUATOR

Leanora Nelson

ACTING COORDINATOR

Ellen Overton

Implementation

The Basic Skills Reading Program (BSC), is a Title I, ESEA funded program in Community School District # 9. The Basic Skills Center was implemented in all schools in line with the project proposal for academic year 1978-79, with minor changes which did not appear to affect program success.

Program Description

The Basic Skills Center is a diagnostic-prescription reading approach which serviced 2,625 pupils in grades 4-8 in 21 schools, (14 elementary and 7 intermediate and junior high schools). Pupils who demonstrated low reading achievement of one or more years based on the New York City Test in Reading were selected. Where scores were unavailable, the Sucher-Allred Placement Inventory was used for screening purposes.

In the diagnostic phase, pupils received the Individualized Criterion Reference Test (ICRT), which is a minimum level performance test. Instruction was based on the results of the ICRT, teacher recommendations and observations.

In the prescriptive phase, pupils received small group or individual instruction from teachers or paraprofessionals, based on previously ascertained needs of individual pupils.

In total reading, as a result of the Basic Skills Center program, pupils will demonstrate a significant increase in reading achievement at the .05 level of significance. This will be measured by the California Achievement Test (CAT), forms C and D, levels 12-17. The purpose is to analyze results of the CAT reading test to ascertain a significant growth in student reading achievement as compared to pre-test.

Test schedule:

Pre-test CAT forms C and D, October, 1978

Post-test CAT forms C and D, May, 1979.

Pedagogical Methodology

Several components describe the pedagogical methodology:

1. Special teaching techniques employed the use of the following:
   a. In the elementary schools teachers serviced approximately 80 pupils in groups of 16-18 each period. In the Intermediate and Junior High Schools, teachers serviced approximately 85 pupils in groups of 16-19 each period.
   b. Teachers planned prescriptive instructional approaches through individual needs assessments and the ICRT results.
   c. Teachers utilized an eclectic reading approach to teach word attack, comprehension and work study skills.
   d. Non-readers from CES 104X and CES 114X, received intensive instruction each period. They also benefited from instruction in the Seventy English Phonograms of 150 most used words. After learning the words, pupils wrote them down and later demonstrated writing skills.

e. The Spalding Method - "The Writing Road to Reading", was used by teachers to develop skill in phonics, accurate speech, writing, spelling and reading.

f. Reading instruction in grades 7-8, was built around Project Approach. This is a reading skills program which assists pupils in discovering interest areas.

2. Class organizations consisted of planned Basic Skills Centers of small group instruction and individualized reading.

3. Frequency of instruction depended on the school's schedule. The desired time frame was 45-60 minutes of instruction 4 times a week:

Minutes/Period	Total Minutes
45	180
60	240

Paricipant/Staff Ratio:

Student/Teacher-6:1	Student Paraprofessional-6:1
Student/Teacher-3:1*	Student/Paraprofessional 3:1*

4. Materials, supplies and services were divided into the following categories:

a. General Instructional Supplies - included workbooks, SRA kits, Croft Skillpacs, paperbacks and games for both instructional and practice purposes.

* Low level/non-reader classes

c. Stockman (1)-was responsible for maintaining inventories of equipment and materials and to deliver same to project sites.

5. Consultants-furnished staff training and evaluation.

Objectives of the Basic Skills Center Program (Curricular-Staff)

1. Analyze ICRT in order to individualize instruction in BSC method of reading, for pupils one or more years below in reading.
2. To use media as an instructional tool with experienced reading staff.
3. To use arts and crafts to teach reading.
4. Select strategies for teaching comprehension skills.
5. To teach pupils to write in a creative and imaginative style.
6. To set up a Basic Skills Center in designated schools in line with in-service training and project description.
7. To use the Spalding Method to help non-readers.
8. To tell parents the results of pupils's learning and to recommend to parents help for pupil's based on reports.
9. To teach pupils to relate and explain sequence and inference in video-taped lessons.
10. To monitor the progress of each pupil in the program.

Objectives of the Basic Skills Center Program (Pupils)

1. States concepts or ideas in own words.
2. Given a series of events, recognizes sequence and inferences
3. Relates similarities, differences and relationships.
4. Carries out an oral reading performance.
5. Displays personal adjustment (self-concept, reactions to thwarting, and handling of anxiety).
6. Displays specific work habits (initiative, promptness, responsibility, etc).
7. Displays positive attitudes in working with others.
8. Displays specific interests.
9. Gives novel examples.
10. Organizes ideas, objects, events, etc. into essentially new patterns.

Staff Performance and Impact on Pupil Achievement

The Coordinator's report stated,

> "Staff performance was crucial to the outcome of the program. Through staff development of teachers and paraprofessionals, we were able to improve the quality of instruction. In this area the staff was better able to diagnose the student deficiencies and provide remediation that was specifically suited for each child".

Achievement Summary

Grades four, five and six demonstrated an exemplary learning record for the 1978-1979 academic year. In grade eight, of the five monitored schools, three demonstrate growth at the .01, level of significance, while the other two show no significance.

Basic Skills Center results, indicate growth primarily in the lower grades (see Table 1, 2, and 3), as compared to the upper grades (see Table 4, 5). The proposal projected a level of growth at the .01 level of significance, but the results indicate an even stronger t score at the .01 level, for those who achieved.

The latter grades show qualitative learning deficiencies. Reading scores do not improve appreciably and the small n's (10,5,1,2), may have contributed to this finding.

Findings

The Basic Skills Center continues as an adjunct to the overall regular tax-levy reading programs in grades 4-8 in Community District #9. The Basic Skills Center program has operated effectively for over three years, therefore most curricular issues are resolved or controlled.

Staff was able to evaluate effective instruction as well as make predictions based upon observations and the ICRT guidelines. The formative evaluation assisted staff in adopting both viable and durable educational practices.

The summative phase of evaluation utilized results of the California Achievement Test to examine reading outcomes of the Basic Skills Center program.

The intensive pre-service and in-service training continues to support creative and artistic practices, and in particular those used by the educational assistants.

According to the coordinator, "Trips were a welcome addition to the program this year". Pupils enjoyed the trips which provided motivation for learning. Trips to 'wildlife recreation parks, the theater, a courtroom, and Department of Motor Vehicles', gave the program a boost.

One hundred fifty pupils who participated in the Mount Vernon T. V. Reading and Communication Replication Program, learned "reading skills through the use of television scripts from 'Lucy' and 'Happy Days'. Equipment included T. V. monitors and equipment for video-taping". A follow-up to the scripts involved pupils who,"dramatize the scripts and tape the scenes themselves".

TABLE I

BASIC SKILLS CENTER

ACHIEVEMENT TEST ANALYSIS

CALIFORNIA ACHIEVEMENT TEST

LEVEL/FORMS 11C-14C

READING

GRADE	N	MEAN GE PRETEST	MEAN GE POSTTEST	DIFFERENCE BETWEEN MEANS	MONTHS IN PROGRAM	t	LEVEL OF SIGNIFICANCE
4	455 (Total N)	2.4	3.3	0.9	8	64.28	p-.01
4	21	3.1	3.5	0.4	8	9.99	p-.01
4	38	2.2	2.9	0.7	8	43.75	p-.01
4	28	2.5	3.0	0.5	8	9.99	p-.01
4	20	1.8	2.2	0.4	8	9.99	p-.01
4	68	2.0	2.9	0.9	8	1.11	p-.05
4	72	2.7	3.4	0.7	8	29.53	p-.01
4	69	2.7	4.6	1.9	8	31.35	p-.01
4	75	2.5	3.2	0.7	8	30.43	p-.01
4	22	1.9	2.7	0.8	8	12.21	p-.01
4	42	2.6	3.7	1.1	8	73.33	p-.01

TABLE II

BASIC SKILLS CENTER

ACHIEVEMENT TEST ANALYSIS

CALIFORNIA ACHIEVEMENT TEST

LEVEL/FORMS 11C-15C

READING

GRADE	N	MEAN GE PRETEST	MEAN GE POSTTEST	DIFFERENCES BETWEEN MEANS	MONTHS IN PROGRAM	t	LEVEL OF SIGNIFICANCE
5	819 (Total N)	2.9	3.8	0.9	8	64.74	p-.01
5	31	3.7	4.5	0.8	8	9.99	p-.01
5	45	2.6	3.4	0.8	8	9.99	p-.01
5	72	2.7	3.0	0.3	8	12.65	p-.01
5	30	3.3	3.9	0.6	8	8.	p-.01
5	24	2.8	3.6	0.8	8	38.36	p-.01
5	84	2.8	3.6	0.8	8	9.99	p-.01
5	73	2.8	3.7	0.9	8	39.29	p-.01
5	73	3.1	5.3	2.2	8	26.69	p-.01
5	144	2.9	3.8	0.9	8	53.89	p-.01
5	48	2.7	3.5	0.8	8	55.17	p-.01
5	70	2.7	3.7	1.0	8	20.76	p-.01
5	17	2.0	2.8	0.8	8	8.	p-.01
5	51	3.3	4.0	0.7	8	16.5	p-.01
5	22	2.3	2.6	0.3	8	13.76	p-.01
5	35	3.3	3.6	0.3	8	17.49	p-.01

TABLE IV

BASIC SKILLS CENTER

ACHIEVEMENT TEST ANALYSIS

CALIFORNIA ACHIEVEMENT TEST

LEVEL/FORMS 12C-16C

READING

GRADE	N	MEAN GE PRETEST	MEAN GE POSTTEST	DIFFERENCES BETWEEN MEANS	MONTHS IN PROGRAM	t	LEVEL OF SIGNIFICANCE
7	84 (Total N)	4.1	4.5	0.4	8	36.69	p-.01
7	16	3.9	3.9	0.0	8	0	p-.01
7	63	4.1	4.6	0.5	8	39.37	p-.01
7	5	4.2	4.4	0.2	8	9.99	n.s.

- 10c -

TABLE III

BASIC SKILLS CENTER

ACHIEVEMENT TEST ANALYSIS

CALIFORNIA ACHIEVEMENT TEST

LEVEL/FORMS 11C-15C

READING

GRADE	N	MEAN GE PRETEST	MEAN GE POSTTEST	DIFFERENCES BETWEEN MEANS	MONTHS IN PROGRAM	t	LEVEL OF SIGNIFICANCE
6	585 (Total N)	3.6	4.4	0.8	8	96.64	p-.01
6	17	4.3	5.1	0.8	8	32.96	p-.01
6	74	3.3	3.9	0.6	8	25.64	p-.01
6	56	3.6	4.5	0.9	8	13.34	p-.01
6	20	4.1	5.1	1.0	8	21.79	p-.01
6	18	3.0	4.0	1.0	8	13.74	p-.01
6	67	3.3	4.1	0.8	8	9.99	p-.01
6	75	4.2	5.3	1.1	8	23.91	p-.01
6	63	3.5	3.9	0.4	8	10.49	p-.01
6	49	3.2	4.1	0.9	8	62.5	p-.01
6	47	4.2	5.4	1.2	8	40.69	p-.01
6	10	2.3	2.1	-0.2	8	- .60	p-.01
6	10	4.5	4.9	0.4	8	60.	p-.01
6	55	3.1	3.5	0.4	8	9.99	p-.01
6	24	4.1	4.5	0.4	8	6.39	p-.01

TABLE V

BASIC SKILLS CENTER

ACHIEVEMENT TEST ANALYSIS

CALIFORNIA ACHIEVEMENT TEST

LEVEL/FORMS 13C-17C

READING

GRADE	N	MEAN GE PRETEST	MEAN GE POSTTEST	DIFFERENCES BETWEEN MEANS	MONTHS IN PROGRAM	t	LEVEL OF SIGNIFICANCE
8	186 (Total N)	5.2	5.9	0.7	8	47.61	p-.01
8	54	5.3	5.8	0.5	8	36.41	p-.01
8	1	5.5	4.8	-0.7	8	-9.99	p-.01
8	69	5.3	6.3	1.0	8	27.48	p-.01
8	60	4.8	5.6	0.8	8	20.51	p-.01
8	2	5.3	5.4	0.1	8	-3.33	n.s.

-10e

Recommendations

1. It is recommended that the Basic Skills Reading Program be continued in District #9 in the 1979-80 school year in grades 4, 5, and 6, and that it be expanded to serve eligible pupils as the needs of the District may dictate.
2. It is recommended that the District adopt a media approach in all reading programs, in order to capture a conditioned audience.
3. It is recommended that the guidelines of pre-service and in-service training be made available to all staff for implementation in District #9.
4. It is recommended that the Individualized Criterion Reference Test, be retained as a diagnostic screening tool in the Basic Skills

program.

5. It is recommended that trained Basic Skills Center staff continue in the program.

Information was disseminated to parents through family assistants who visited, phoned and corresponded with the home. Workshops provided means for staff to exchange views and demonstrate techniques. Basic Skills Center newspapers, brochures, open house days, newsletters, handbooks, and progress reports provided sources of information to pupils, parents, Parent Advisory Council, community board, staff and District office.

Although concern was expressed regarding the late funding the coordinator felt the program followed the proposal description quite adequately.

Function Number 5049-91623

PROJECT BEST

FINAL REPORT

SCHOOL YEAR 1978-79

An evaluation of a New York City School District educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1978-79 school year.

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research & Evaluation

Sylvia Hernandez
Coordinator, Project Best

AN EXECUTIVE ABSTRACT

PROJECT BEST

5049 - 91623

Sylvia Hernandez
Coordinator

The Project Best Program objective was behavioral change in the area of English Proficiency in the Spanish dominant child. This was to be demonstrated by an increase of mastery in reading skills as measured by the Wisconsin Design Word Study Skills. The program methodology utilized a bilingual/ bicultural approach to improve skills. It was specifically designed to supplement instructional services to students in ASPIRA classes, grades one through six. The program utilized a multimedia approach in reading, emphasis on basic computational skills in math, and an overall bilingual methodology to achieve its objectives. Test results indicated a significant increase in reading and math skills.

Function Number 5049-91623

PROJECT BEST

TAX-LEVY YEAR 1978-79

ESEA-TITLE I

EVALUATOR

Valerie Moss Washington

COORDINATOR

Sylvia Hernandez

Program Objective

The project Best Program objective as specified in the proposal was behavioral change in the area of English Proficiency in the Spanish dominant target child. This was to be demonstrated by an increase in mastery of reading skills as measured by the Wisconsin Design Word Study Skills. Eighty per cent correct, per objective, for 15 objectives, selected by the staff would indicate success.

Program Description and Methodology

The Title I Project Best Program is a remedial program for reading and mathematics which utilized a bilingual/bicultural approach to improve skills. The teacher met with the pupils in grades one through six (1-6) forty five (45) minutes daily, five (5) days each week. It was specifically designed to supplement instructional services to students in bilingual ASPIRA classes. The program was based on a diagnostic/prescriptive format. Pupil achievement and needs were identified through the use of the Wisconsin Design of Skill Development in Reading and Mathematics. The results provided the basis for a prescribed, individualized program of instruction for each child. A team of one teacher and two paraprofessionals worked with each small group of twelve (12) to fifteen (15) students.

In reading, a multimedia approach was used to develop comprehension, speaking and writing skills. In mathematics, emphasis was on acquisition of basic computational skills (addition, subtraction, multiplication and division) using concrete materials and examples to assure concept formation. Important to the success of the program was open communication between Title I, Tax Levey and ASPIRA teachers which enabled them to reinforce instruction without duplication. Important, also, was adding remedial instruction in Spanish. All program staff was bilingual. An interdisciplinary approach utilizing the Hispanic culture as a vehicle for developing increased communication skills (thinking, questioning, speaking, listening, reading and writing) in both English and Spanish was an integral part of the program.

Individualization of the program was achieved by use of students' summary forms on which data could be entered and updated, student learning activities assigned and adjusted to meet indicated needs.

The Best Program, in order to develop basic skill in reading and math, emphasized eclecticism which allowed for individual pupil learning modes and needs, language strength, varied teaching styles as well as the inclusion of concrete experiences.

Implementation

According to the program coordinator's report. the Best Program was implemented as specified in the proposal with few discrepancies. Some of these resulted from the late approval of the program and the consequent loss of staff members.

Assessment of Staff Performance and Impact On Pupil Achievement

A specially selected bilingual/bicultural staff, on-going staff training and development and planning and articulation of methods and materials among Tax Levy Title I and ASPIRA teachers were mentioned by the coordinator as having a positive impact on pupil achievement. It was noted that the staff maintained an open, cooperative, concerned, attentive attitude about the program and student growth. They continually sought innovative solutions to problems relating to instruction or the administration of the program. Staff attitude and attention to the program in conjunction with motivating multimedia materials, bilingual methodology (with learning in the dominant language), unique materials made available through the program and a stimulating learning environment seems to have had a positive effect on learning.

Evaluative Procedures

The students were administered the Wisconsin Design for Mathematics and Reading Achievement as a pre-test and post-test. It was expected that the Spanish dominant children would, as a result of instruction, improve in English Proficiency as demonstrated by an increase in the mastery of reading skills.

Table 1 and Table 2 show the mean difference in pre-test and post-test score for objectives mastered on the reading and mathematics tests, respectively. The mean difference for each school and the Total Mean for each grade is shown. In reading, the mean grade difference between pre and post tests for no school met the criteria of mastery of fifteen (15) objectives.

Conclusions

1. The grade mean difference for all grades and all schools for reading showed an increase in reading skill mastery.
2. If mastery of fifteen (15) objectives can be assumed to be the goal for mathematics, the grade mean difference for several grades in many schools as indicated in Tables 2 and 3 demonstrated significant increase in mathematics skill mastery.
3. Wisconsin Design of Reading Development measured increase in specific reading skill mastery but not language fluency which was the stated program objective.

Table 1

Project Best

Analysis of Reading Scores

Using a Criterion Referenced Test Design

(Wisconsin Design Test of Reading Skill Development)

Mean Grade Difference in Pre and Post Test Scores

Grade	N	64	235	163	114	104	11	28	42	53	55	70	73	90	126	Total Mean
1	313	9.7	8.0	5.7	4.5	4.2	5.1	2.1	6.3	2.3	5.1	4.6	5.5	3.5	0	5.3
2	257	8.4	6.2	4.7	7.0	3.4	7.4	3.0	5.5	2.0	6.3	5.0	8.6	5.7	0	5.7
2/3	3	0	0	0	0	0	9.3	0	0	0	0	0	0	0	0	9.3
3	258	0	6.0	8.0	9.2	7.6	7.5	4.8	5.2	3.4	7.7	8.4	7.8	5.2	0	6.8
4	238	13.4	8.5	0	7.3	8.6	0	4.4	3.0	4.2	7.6	6.7	9.3	5.6	6.1	7.3
5	220	13.1	9.0	0	9.5	7.5	0	5.8	4.5	6.6	6.2	7.9	11.8	7.8	9.5	8.4
6	88	8.3	8.5	0		6.5	0	6.1	3.1		9.9	5.9	0	0	10.6	7.6
Total N =	1377	132	75	70	143	75	66	78	68	114	127	142	76	150	61	

Table 2

Project Best

Analysis of Mathematics Scores

Using a Criterion Referenced Test Design

(Wisconsin Design of Mathematics Skill Development)

Mean Grade Difference in Pre and Post Test Scores

Grade	N	64	235	163	114	104	11	28	42	53	55	70	73	90	126	Tota Mean
1	310	7.0	19.9	8.3	13.7	9.1	14.9	5.2	3.3	3.7	12.9	8.3	17.8	7.8		10.
2	257	16.7	15.1	13.2	19.6	16.5	17.4	9.7	4.5	6.5	12.9	13.5	20.7	12.0		11.
2/3	3						20.0									20.
3	257		14.6	12.6	17.7	18.3	11.2	9.4	6.1	6.5	11.0	12.8	16.1	12.6		12.
4	237	19.0	16.3		14.7	16.9		8.3	5.0	6.9	11.7	12.5	17.5	13.5	13.3	13.
5	216	21	9.5		15.7	17.5		5.8	1.7	8.8	9.6	18.6	18.5	12.4	13.7	12.
6	88	12.8	16.5			17.8		5.9	3.9		9.8	30.1			14.3	14.
Total N =	1368	131	74	70	143	75	66	76	68	111	127	140	76	150	61	

Table 3

Project Best

Analysis of Mathematic Scores

Using a Criterion Referenced Test Design

(Wisconsin Design of Mathematics Skill Development)

Schools in Which Mean Grade Difference of Pre and Post Test Exceeds 15

Schools	GRADES 1	2	2/3	3	4	5	6
64		16.7			19.0	21	
235	19.9	15.1			16.3		16.5
163							
114		19.6		17.7		15.7	
104	16.5			18.3	16.9	17.5	17.8
11		17.4	20				
28							
42							
53							
55							
70						18.6	30.1
73	17.8	20.7		16.1	17.5	18.5	
90							
126							
Percentage	23%	38%	100%	25%	33%	42%	38%

4. Evaluation by program participants (teachers, parents, paraprofessionals and students) were not included.
5. Program proposal did not completely outline all component objectives, indicators and criteria for evaluation.
6. Communication and cooperation among Title I, Tax Levy, and ASPIRA teachers enhanced program by eliminating duplication of teaching and reinforcement efforts.
7. Specially selected bilingual staff had a positive effect on the program. Criteria used for staff selection were not identified.
8. Using the child's dominant language for instruction and creative teacher made materials were effective techinques.
9. In some schools space was inadequate.

Recommendations

1. The program should be continued.
2. Program objectives should be clearly outlined and inclusive of all components specifying terminal behaviors, indicators in which instruction was given and skills practiced.

3. Test administration dates should be recorded.
4. Provisions for evaluation by all program participants (teachers, parents, paraprofessionals and students) should be made using questionnaires, surveys, reports, etc.
5. The evaluating instrument should measure the skill being taught. For example, a measure for reading skill development should not be used to measure English language fluency.
6. Criteria for teacher selection should be identified.

Function Number 5049-91624

BILINGUAL JUNIOR HIGH SCHOOL

FINAL REPORT

SCHOOL YEAR 1978-79

An evaluation of a New York City School District educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1978-79 school year.

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research & Evaluation

Jesus Barbosa
Coordinator, Bilingual Junior High School

AN EXECUTIVE ABSTRACT

BILINGUAL JUNIOR HIGH SCHOOL

5049 - 91624

Jesus Barbosa
Coordinator

The stated objective of the program was to effect behavioral change in the area of English Proficiency. The Spanish dominant child was to demonstrate an increase in the mastery of reading skills as measured by the Wisconsin Design Word Study Skills. The program serviced 1,125 pupils in 7 schools. The Wisconsin Design Program and resource kit, workbooks, skill kits, etc were used for individualized instruction. Units of special interest, using Hispanic and American Culture as source material, were used as vehicles of instruction. Basic to instruction was the initial instruction and reinforcement in the dominant language (Spanish) and a gradual introduction of the second language (English). The Wisconsin Design for Mathematics was used to assess children's skill mastery in math. Instruction was provided in small groups in basic concepts and skills. The stated goal in reading was the successful completion of 15 objectives. The mean increase for objectives mastered for for the program in reading was 7.3. The mean increase in math was 6.4.

Function Number 5049-91624

BILINGUAL JUNIOR HIGH SCHOOL

TAX-LEVY YEAR 1978-79

ESEA-TITLE I

EVALUATOR

Valerie Moss Washington

COORDINATOR

Jesus Barbosa

Program Objective

The stated objective of the Bilingual Junior High School Title I Program was to effect a behavioral change in the area of English Proficiency. The Spanish dominant target child was to demonstrate an increase in the mastery of reading skills as measured by the Wisconsin Design Word Study Skills. Fifteen objectives were to have been chosen and eighty percent correct per objective would be considered mastery.

Program Description and Methodology

The Bilingual Junior High School Program, a supplementary reading and mathematics program was designed to provide remedial instruction for 1125 pupils in seven (7) schools (CJHS 22, 82,117, 145, 147, 148 and 166) in grades six through nine (6-9). Title I teachers and paraprofessionals worked with small groups of ten (10) to fifteen (15) students for forty-five (45) minutes. Individualized instruction was provided as needed.

The Wisconsin Design for Reading Skill Development, teacher made tests and exercises and observations of children's performance were used to assess children's level of skill mastery. Teaching was based on each student's profile which included the above information and indicated the specific skill instruction needed in the areas of word attack, comprehension and study skills. The Wisconsin Design Program and resource kit, workbooks, skill kits, games and books in Spanish and English were used for instruction.

In order to stimulate and maintain interest, units of special interest to the students were used as vehicles of instruction. In some instances these units were concomitant with the students' Hispanic background. For example, Hispanic sports stars, or the food or music of Puerto Rico. Self selection of the unit added to student involvement and helped sustain interest. An aural-oral approach to reading and writing about the selected units was followed. Emphasis was placed on vocabulary development through concrete first hand experience (objects, people, places). This language-experience approach began with simple phrases and sentences and progressed to paragraphs. Pattern practice exercises provided the models of English language structure, and interest in particular units provided the context in which to develop the writing and reading skills. Dictation by the teacher heightened listening and auditory discrimination skills.

The specialized nature of the units required the teams to adopt and create materials to meet the needs of the children. Traditional skill texts could not provide the needed information. Tradebooks magazines pictures, films, filmstrips, visits and people provided source material for students to think, speak, read and write about. Since underlying all program goals was the objective to strengthen American, Puerto Rican and Hispanic cultural awareness, it was essential to the success of the program that a wide variety of learning activities, not included in the traditional texts, be utilized.

Pupil needs and individual teacher styles made the instruction eclectic. Basic, however, was the initial instruction and reinforcement of skills in the dominant language (Spanish) of the student and the gradual introduction of the second language (English).

The Wisconsin Design for Mathematics Skill Development was used to assess children's level of skill mastery in mathematics. This criterion referenced instrument provided a profile of individual needs for instruction in basic concepts and skills. Instruction was provided to small groups in addition, subtraction, multiplication and division. Concrete examples and experiences related to real life situations were emphasized.

Probability, geometry, statistics, charting, graphing of information and verbal problem solving were also included in the program.

Implementation

According to the coordinator's final narrative report, the Bilingual Junior High School Program was implemented according to the description and stipulations of the program proposal. In some schools deviation from the design occurred because of circumstances which were beyond the control of the program coordinator and staff. These were:

1. Specified instructional materials were delivered late delaying implementation of certain aspects of the program.
2. Children were not uniformly tested in October 1978 for pre-test purposes.
3. The program consisted of other components besides the reading mastery as indicated in program proposal. For example, mathematics skill development and oral written language.

Assessment of staff Performance and Impact on Pupil Achievement

According to the program coordinator, especially significant in evaluating staff performance was the fact that the staff was selected for the program and that regular workshops were provided. The above, in addition to open communication and cooperation among staff was thought to have a positive impact (effect) on pupil achievement. The program design did not provide for teacher self evaluation or evaluation by the coordinator.

Willingness of pupils to attend classes, extra help to needy pupils and teacher quality contributed to better student performance. However, there are no questionnaires or student/teacher reaction sheets regarding the program.

Findings

The stated objective of the ESEA Title I Bilingual Junior High School Program was to increase reading skills in the Spanish dominant target child. English Proficiency was indicated as the area of behavorial change. The target population was to have been administered the Wisconsin Design for Reading and Mathematics skill Development in October 1978 as a pre-test and in mid May 1979 as the post-test.

Data analysis was to be based on fifteen (15) objectives selected by the staff to measure reading achievement with eighty (80) per cent per objective considered a success. The reports submitted did not identify any objectives as those selected. Since mathematics was not included in the proposal, no criteria for mathematics was stated.

Tables 1 and 2 were prepared from avialable data based on pre-test and post-test scores for each child. The difference indicates mastery of that number of skills.

Table 1 shows the mean increase in objectives mastered for each grade listed by school and the grade mean for the program in reading. The mean increase for objectives mastered for the overall program in reading for all grades and schools is 7.3. The stated goal of an increase in reading ability based on the successful completion of fifteen (15) objectives was not satisfied (based on means of classes and grades). There were individuals in the program who successfully completed fifteen (15) or more objectives. There were also many who completed on (1) or none (0).

Table 1

Bilingual Junior High School

Analysis of Reading Scores

Using a Criterion-Referenced Test Design

(Wisconsin Design of Mathematics Skill Development)

Grade	166	148	147	145	117	82	22	N	Mean For Grade
5/6	11.5							16	11.5
6			6.1	4.4		7.3	6.1	82	5.9
7/8	16.4	10.1						66	13.9
7		15.5	5.7	5.1	3.6	7.8	7.4	166	7.7
8		9.0	2.5	4.0	5.0	7.4	2.0	175	5.1
9					4.1			18	4.1
NG (6,7,8)				4.4				8	4.4
NG (6,7)							2.3	15	2.3
N	56	80	59	54	70	77	150		
Pre-test	10/78	10/78	3/79	11/78,12/78	12/78	10/78	10/78,2/79		
Post-test	5/79	5/79	5/79	5/79	5/79	5/79	5/79		
Months in Program	7	7	2	5-6	5	7	3-7	546 = Total N	

- 28a -

7

Table 2 shows the mean increase in objectives mastered for each grade listed by school and the grade means for the program in mathematics. The mean increase for the objectives mastered for the overall program for all grades and schools is 6.4. The program proposal did not specify criteria for sucessfull mastery in mathematics, but generally there was an increase in skill mastery in mathematics.

Since students worked individually on specifically diagnosed skills, other factors relating to attendance, motivation, facility with English and ability to work independently must be considered.

The proposal does not provide for evaluation of the oral and written language aspects of the program nor for the ethnic cultural components. The Wisconsin Design of Skill Development provided data relating to specific reading and mathematics skills but cannot evaluate language development (oral or written) nor the effectiveness of using culturally related topics as a means of enhancing self concept, identity, interest and increasing reading, writing and speaking skills.

Table 2

Bilingual Junior High School

Analysis of Mathematics Scores

Using a Criterion Referenced Test Design

(Wisconsin Design of Mathematics Skill Development)

Grade	166	148	147	145	117	82	22	N	Mean For Grade
5/6	4.1							26	4.1
6			7.4	9.8		9.5	1.8	54	6.8
7/8	6.8	9.0						79	8.0
7		8.5	8.6	7.1	4.3	9.8	4.2	136	6.9
8		10.5	5.9	7.2	2.7	11.4	3.1	140	7.7
9					3.3			26	3.3
NG (6,7,8)				8.2				45	8.2
N	67	87	66	75	61	75	75		
Pre-test	10/78, 11/78	4/78, 9/78	1/79,2/79, 3/79	10/78, 11/78	11/78, 2/79	10/78,	2/79		
Post-test	5/79	5/79	2/79,5/79	5/79	5/79	5/79	5/79	506 = Total N	
Months in Program	6-7	8	2-5	6-7	3-6	6-7	3		

Conclusions

1. Students show progress in specific skill mastery as measured by the Wisconsin Design of Reading and Mathematics Development.
2. Data is not available regarding growth in language (writing and speaking).
3. Data is not available concerning the effectiveness of cultural aspects of the program as a teaching methodology or as a tool to enhance self-concept and identity.
4. Ongoing evaluation by administrators, coordinators, teachers, paraprofessionals regarding program implementation is not adequate.
5. Lack of uniformity in test date administration distorts results and meaningful interpretations can not be made.
6. Specially selected staff enhanced program operation.
7. Pupil attendance was improved.
8. Lack of adequate space at some schools.

Recommendations

1. The program should be continued.
2. The coordinator and other program participants should evaluate the program's progress and indicate problem areas on an ongoing/final basis.
3. Other measures of pupil progress in the area of oral and written language and the ethnic-cultural language experience methodology are needed. This can be done by teachers using checklists outlining specific skill objectives and using the pre-test, post-test format.
4. Tests should be administered at a uniform time to all grades and schools participating in the program in order to utilize test data more effectively.
5. Teacher selection criteria should be continuously reviewed.
6. In order to fully realize its potential and be evaluated on its own merits, full cooperation of supervisors and administrators should be enlisted provide adequate learning space.
7. More specific learning objectives should be identified including all aspects of the program and outlining the expected terminal behavior, indicators and evaluators.

8. Teachers, coordinators and paraprofessionals should be involved in planning in order to insure complete understanding of program's objectives.
9. Workshop training sessions should be continued.

Function Number 5049-91625

REMEDIAL LAB PROGRAM

FINAL REPORT

TAX-LEVY YEAR 1978-79

An evaluation of a New York City School District educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1978-79 school year.

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research and Evaluation

Jack Billig
Coordinator, Remedial Lab Program

AN EXECUTIVE ABSTRACT

REMEDIAL LAB PROGRAM

5049 - 91625

Jack Billig
Coordinator

Remedial Lab is a diagnostic - prescriptive approach to correcting learning problems. The program serviced 300 pupils at CES 132x in grades 3-6. Pupils received small group or individual instruction from teacher or paraprofessional, based on the California Achievement test diagnostic print outs of mastery and non-mastery of specific skill areas. A variety of materials are used molded to students needs. Tests results show that all grades performed significantly better on their post tests. The proposal indicates a desire to reach a significance level of .05 for test results, but results tend to support a more dramatic outcome at the .01 level.

Function Number 5099-91625

REMEDIAL LAB PROGRAM

TAX-LEVY YEAR 1978-79

ESEA-TITLE I

EVALUATOR

Leanora Nelson

COORDINATOR

Jack Billig

Implementation

Remedial Lab is a Title I, ESEA program in Community School District #9. The Remedial Lab program was implemented in line with the project proposal for academic year 1978-1979.

Program Description

Remedial Lab is a diagnostic-prescriptive approach to correcting learning problems. The program serviced 300 pupils at CES 132X in grades 3-6. The instructional objective was to provide intensive small group instruction for those pupils who demonstrate one or more years of deficiencies in reading and mathematics. To meet the objective, teachers organized individual learning programs based on results of specific skill inventories.

In the diagnostic phase pupils who demonstrate one or more years retardation as shown in scores from the 1978 New York City Test in Reading and/or the New York City Mathematics Tests, were selected.

In the prescriptive phase, pupils received small group or individual instruction from teacher or paraprofessionals, based on the California Achievement Test (CAT), forms C or D, diagnostic print out of mastery and non-mastery of specific

skill areas. In addition to this measure, teachers planned instruction based on individual and group profile sheets, observation and classroom evaluation.

In total reading and mathematics, as a result of Remedial Lab, pupils will demonstrate a significant increase in achievement at the .05 level of significance when compared to pretest. This will be measured by the California Achievement Test (CAT), forms C and D, levels 12-15.

Test Schedule:

Pretest-CAT forms C and D, October 1978.

Posttest-CAT forms C and D, May, 1979.

Implementation of Instructional Objectives

The Title I Remedial Lab program is geared to supplement and complement the regular tax-levy reading program in CES 132X. The instructional objective was to provide small group instruction for those pupils demonstrating deficiencies in reading and mathematics.

Classroom organization consisted of one teacher and two paraprofessionals who worked as a team to teach 75 pupils in groups averaging 15 in number. A total of 4 teachers and 8 paraprofessionals taught. Subgroups ranging in sizes from two to seven were formed based on needs assessments. Whole group instruction occurred when new concepts were introduced.

In addition, a continuous dialogue between the Remedial Lab staff and tax-levy teachers was maintained to carry over pupil progress in the lab to the regular classroom and vice-versa.

Special teaching techniques involved varied approaches in reading and mathematics which were matched to learning styles of target pupils as indicated in the coordinator's narrative:

> "A key facet of the Remedial Lab is that it incorporates a variety of commercial and teacher-made materials to facilitate individualization. Materials are molded to the pupils needs rather than having a pupil locked into a set of materials. Where one approach doesn't work another may. Listening centers also aid small grouping. As skills are taught, testing is done to note mastery or need for further remediation".

Pupils were continuously monitored throughout the year as to progress in mathematics and reading. The most prevalent instructional mode was therefore predicted on the following frequency of instruction:

> Reading-45 minutes per period, 5 days a week, a total of 225 minutes.

Mathematics-45 minutes per period 4 days a week, a total of 180 minutes.

Participants/staff ratio for instructional sessions was:

Pupil/staff 5:1.

Staff

Staff members were classified as follow:

1. Instructional
   a. Teachers were responsible for implementing the instructional objectives of the program, maintain pupil profiles, plan for instructional individualization and assess and evaluate progress.
   b. Paraprofessionals assisted teachers in preparing materials and carrying out all lab instructional activities under supervision.
2. Supervisory
   a. The coordinator was responsible for the total implementation of the Remedial Lab program. The coordinator informed the tax-levy teachers about techniques and approaches used in the program in order to reinforce instruction. In addition, meetings were held with the principal to facilitate integration of the program into

the total school curricular. Other duties included on-going program assessment, conducting workshops, staff training and coordinating parent open-house.

3. Supportive Services
   a. The principal of the tax-levy school was the final authority for the Remedial Lab, within the school.
   b. The secretary performed clerical duties and prepared and duplicated materials.

Materials and Supplies

1. General Instructional Supplies -included SRA Kits, Barnell-Loft, Harcourt Brace, Reader's Digest, and Mathematics games.
2. Testing Materials-used to assess and evaluate program.
3. Audio-Visuals-included earphones, tapes, films, and filmstrips to motivate pupils and to be used in individualized instruction.
4. Clerical Supplies and Office Equipment-used to administer program.
5. Printing and Postage-provided for record-keeping and disseminating of information to parents.
6. Pupil Records-contained profile sheets which served as an on-going reflection of success or needs. They contained but were not limited to

results of standardized tests such as New York City Reading and Mathematics scores, California Achievement scores, CAT diagnostic print outs, work folders and attendance records.

Impact on Pupil Achievement

The coordinator's narrative provided an assessment of staff performance and impact on pupil achievement:

> "The Remedial Lab as noted above has been successful. This has been due to the whole staff performance. The staff has been a very stable factor in the Lab's history. Pupils identify the Lab as integral, known part of the school's program. They know what the Lab can do for them in terms of getting help in Reading and Math. Most pupils truly enjoy visiting the Lab due to attention, materials and staff. Staff has grown with the program and developed increased proficiency working with and helping pupils".

Achievement Summary

Grades three, four, five and six in the Remedial Lab program at CES 132X, demonstrate an exemplary learning record for the 1978-1979 academic year.

All grades performed significantly better on their posttests.

The proposal indicates a desire to reach a significance level of .05, but results tend to support a more demanding outcome at the .01 level. The t value is greater than the tabled value for all cases in grades three and four (see tables 3 and 4). We can therefore conclude that the impact of Remedial Lab upon pupil growth in reading and mathematics was significant.

In grades five and six it was not clear whether the same pupils took both reading and mathematics forms of the California Achievement Test. However, in grade five (see Table 3), no significant result was indicated in one class which showed a minor increase of 0.2.

The sixth grade classes respective mean scores complements the performance in Remedial Lab, (see table 4). Should the mean score of the class which showed no significance be omitted, the mean growth would average 1.04 for grade six. This is particularly important because of the tendency to feel that remediation weakens in the upper grades. The Remedial Lab program demonstrates an effective design for change.

TABLE I

REMEDIAL LAB

ACHIEVEMENT TEST ANALYSIS

CALIFORNIA ACHIEVEMENT TEST

LEVEL/FORMS 12C

READING

GRADE	N	MEAN GE PRETEST	MEAN GE POSTTEST	DIFFERENCE BETWEEN MEANS	MONTHS IN PROGRAM	t	LEVEL OF SIGNIFICANCE
3	14	1.5	2.3	0.8	8	28.8	p-.01
3	9	2.0	3.3	1.3	8	12.2	p-.01
3	16	1.9	2.8	0.9	8	17.4	p-.01
3	16	1.4	2.3	0.9	8	17.4	p-.01

-41a-

TABLE II

REMEDIAL LAB

ACHIEVEMENT TEST ANALYSIS

CALIFORNIA ACHIEVEMENT TEST

LEVEL/FORMS 13D

GRADE	N	MEAN GE PRETEST	MEAN GE POSTTEST	DIFFERENCE BETWEEN MEANS	MONTHS IN PROGRAM	t	SIGNIFICANCE
			MATHEMATICS				
4	8	2.8	3.7	0.9	8	23.8	p-.01
4	9	3.1	4.1	1.0	8	14.1	p-.01
			READING				
4	13	2.3	3.3	1.0	8	17.3	p-.01
4	16	2.9	3.8	0.9	8	34.8	p-.01

TABLE III

REMEDIAL LAB

ACHIEVEMENT TEST ANALYSIS

CALIFORNIA ACHIEVEMENT TEST

LEVEL/FORMS 14D

GRADE	N	MEAN GE PRETEST	MEAN GE POSTTEST	DIFFERENCE BETWEEN MEANS	MONTHS IN PROGRAM	t	LEVEL OF SIGNIFICANCE
			READING				
5	5	4.0	5.4	1.4	8	28.	p-.01
5	10	3.4	4.2	0.8	8	26.6	p-.01
5	8	3.3	3.5	0.2	8	1.76	n.s.
			MATHEMATICS				
5	15	3.6	4.7	1.1	8	20.5	p-.01
5	16	3.2	4.4	1.2	8	15.4	p-.01
5	9	2.6	3.6	1.0	8	2.828	p-.05

TABLE IV

REMEDIAL LAB

ACHIEVEMENT TEST ANALYSIS

CALFORNIA ACHIEVEMENT TEST

LEVEL/FORMS 15D

GRADE	N	MEAN GE PRETEST	MEAN GE POSTTEST	DIFFERENCE BETWEEN MEANS	MONTHS IN PROGRAM	t	SIGNIFICANCE
			MATHEMATICS				
6	6	4.0	5.5	1.5	8	34.09	p-.01
6	3	3.3	4.1	0.8	8	-11.4	p-.01
6	8	3.9	4.9	1.0	8	8.8	p-.01
			READING				
6	17	4.7	5.8	1.1	8	9.9	p-.01
6	14	4.4	5.2	0.8	8	7.2	p-.01
6	6	3.3	3.4	0.1	8	0	n.s.

TABLE V

LIST OF ICRT CRITERION OBJECTIVES

0129	Multiply a Three Digit Number by a Three Digit Number
0130	Multiply a Four Digit Number by a Two Digit Number
0131	Multiply a Two Digit Number by a One Digit Number (Word Problem)
0132	Solve Problems With Money Using the Basic Operations
0133	Solve Problems Using Multiplying and Subtracting
0134	Separate Counting Numbers into Factors
0135	Find the Perimeter of a rectangle
0136	Tell if a Curve is Open or Closed
0137	Mark Parallel Lines
0138	Use number Pairs to Find Points on a Plane
0139	Mark a Cylinder and a Cone
0140	Find fractional Parts of a Figure
0141	Find the Numerator and Denominator of a Fraction
0142	Mark the Fractional Part of a Number
0143	Match Equal Fractions

TABLE V

LIST OF ICRT CRITERION OBJECTIVES/Cont'd

0144	Use a Number Line to Find the Order of Fractions
0153	Find the Elements of a Set
0154	Solve Set Problems Using Venn Diagrams
0155	Match Equal Base Ten and Base Five Numbers
0156	Add Whole Numbers
0157	Subtract Whole Numbers
0158	Multiply Whole Numbers (Four Digit Factors)
0159	Find the Complete Factorization of Whole Numbers
0160	Find the Least Common Multiple of a Pair of Numbers
0161	Find the Area of a Rectangle
0162	Solve Problems Using a Pictograph
0163	Solve Problems Using a Bar Graph
0164	Solve Problems Using Legends and Scale Drawings
0165	Match Equivalent Fractions
0166	Reduce Fractions to Lowset Terms
0167	Use Fractions to Solve Word Problems

TABLE V

LIST OF ICRT CRITERION OBJECTIVES/Cont'd

0168	Add Fractions and Write Sums in Lowest Terms
0281	Given Three Choices Find a Pythagorean Triple
0282	Find Square Root to the Nearest Hundreth
0283	Complete Equations Showing a Trigometric Ratio
0284	Solve Problems Using Trigometric Ratio
0285	Find the Surface Area of a Cube
0286	Find the Surface Area of a Right Rectangular Prism
0287	Find the Surface Area of a Sphere
0288	Find the Surface Area of a Cylinder

Findings

The Remedial Lab program has enjoyed continued success at CES 132X. The program is considered a supplement/complement to the total curriculum.

The effective continual use of diagnostic-prescriptive techniques, including general instructional supplies such as Reader's Digest, SRA Kits and mathematics games, in addition to audio-visual materials helped to identify specific skills, strengths and weaknesses during the academic year.

Emphasis on individualized instruction and rapport between staff and pupil had a significant impact on pupil achievement. Small teacher/pupil ratio combined with qualified personnel were integral to program success.

The coordinator summarized the program's impact as follows:

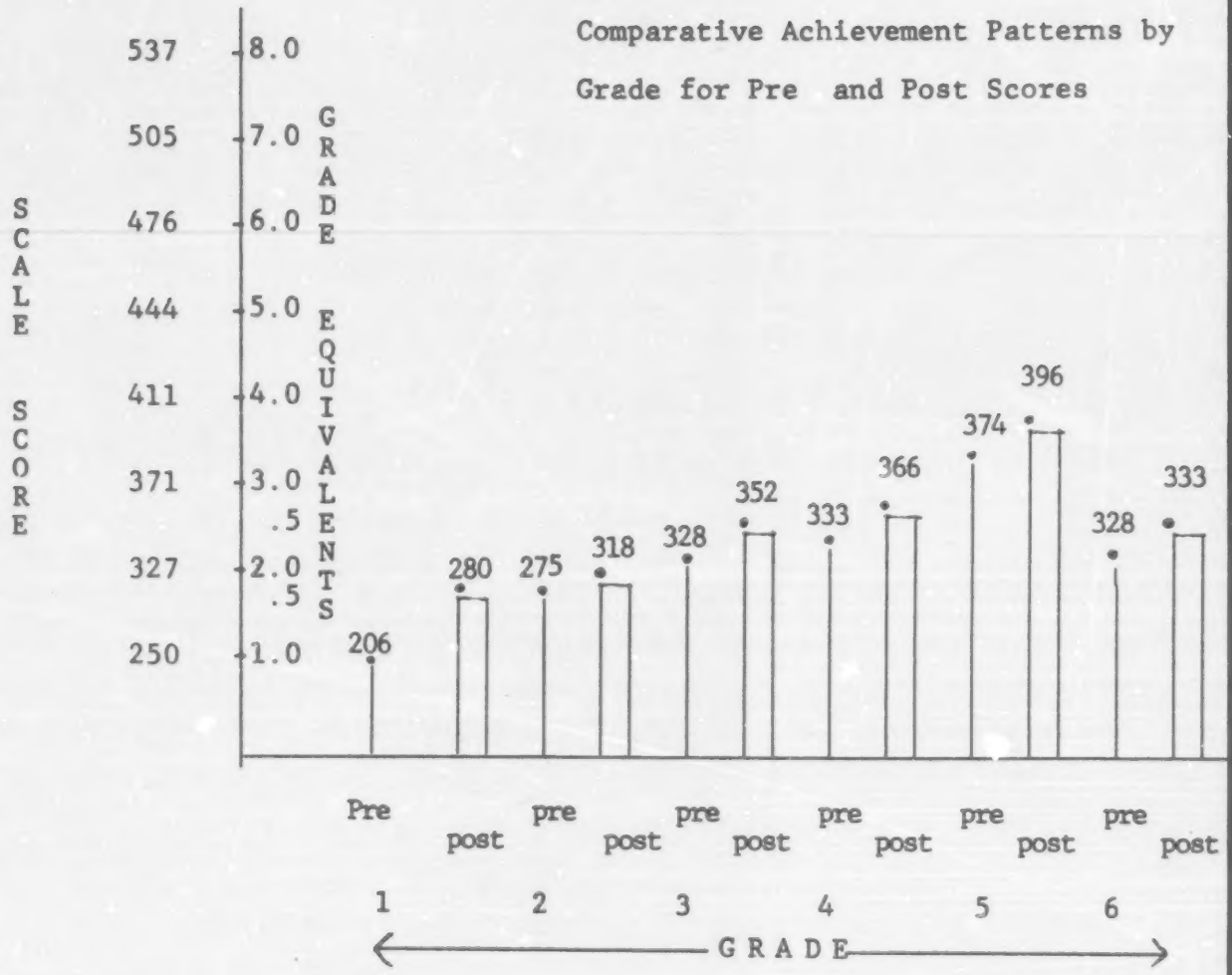
> "...The most significant factor in the success of the Lab is the fact that it was an outgrowth of a need at 132. The program is identified with the school and truly supplements its programs. Because of its close integration within the school, the Lab feels its achievements closely tied with those of the school. Staffs are not separate. The children see both their classroom and Lab teachers as "their teachers".

Recommendations

1. It is recommended that the program be recycled in 1979-80 in CES 132X, in Community School District #9.
2. It is recommended that the exemplary staff sharing with regular tax-levy teachers be continued.
3. It is recommended that the small ratio of teacher/pupil be continued.
4. It is recommended that records, reports, data etc., be shared with evaluator.
5. It is recommended that the two classes in grades five and six that showed no significant test results be followed up for further study.
6. It is recommended that the special skills taught in Remedial Lab be designed as a curriculum for District use.

GRAPH 1

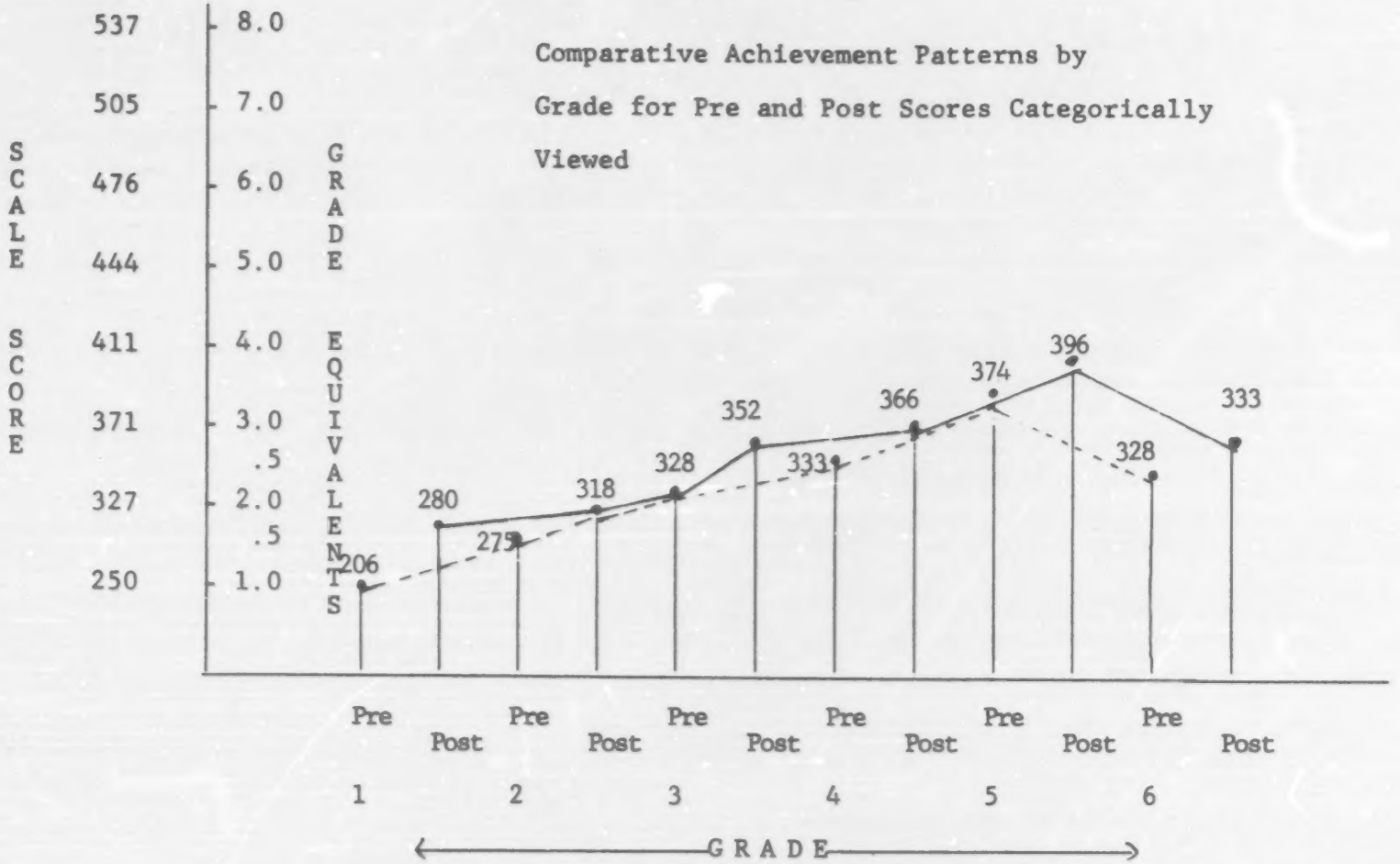
Comparative Achievement Patterns by Grade for Pre and Post Scores



Note: = Pre-test score = Post-test score

GRAPH 2

Comparative Achievement Patterns by Grade for Pre and Post Scores Categorically Viewed



Note:

(._____.) = Post-test score (.--------.) = Pre-test score

Function Number 5049-91626

PRESCRIPTION LEARNING: MATHEMATICS

FINAL REPORT

SCHOOL YEAR 1978-79

An evaluation of a New York City School District educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1978-79 school year.

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research & Evaluation

Florence Greenspan
Coordinator, Prescription Learning

AN EXECUTIVE ABSTRACT

PRESCRIPTION LEARNING - MATHEMATICS

5049 - 91626

Florence Greenspan
Coordinator

The program was divided into two components, the MacMillan Component and the Think Component. Around 400 Children were serviced in five schools. The instrument used to measure the students achievement was the California Achievement Test. In reference to the MacMillian component a significant increase in scores was evident in all grades with the exception of one second grade class. The Think Component achieved expected post test level in two out of five schools. Graph 1 and 2 (pages 105,107) show that most classes performed above expected post test level. There were a few problem areas cited in the report and recommendations were made as to how to rectify them.

Function Number 5049-91626

PRESCRIPTION LEARNING: MATHEMATICS

TAX-LEVY YEAR 1978-79

ESEA-TITLE I

EVALUATOR

Theodore A. Davis

COORDINATOR

Florence Greenspan

Implementation

The project proposal for Prescriptive Learning was divided into two separate components. These components were entitled as follows:

a. the MacMillan Component and

b. the Think Component

Each component will be analyzed separately, in determining if they were implemented in line with the project proposal.

Porcedures and Methodology

Both the Think and MacMillan components seemed to follow the proposal description well, in pertaining to instruction, methods, and materials used. The coordinator's narrative report indicates good structure, in that small group instruction was given with the paraprofessionals reinforcing the objectives. Commercial-made materials were used, as well as audio visual materials. The extent of the use of these materials was not stated; however, there were no complications indicated in the coordinator's monthly statements pertaining to materials and equipment used.

Detected were two complications:

1. It was discovered (as stated in the coordinator's monthly statement), that a teacher in CES 114 was not following program guidelines, therefore CES 114's program did not comply with the proposal until December, 1978. This without doubt had an impact on pupil achievement because of the improper methodology used. In addition, students had to readjust to new methods, as well as become accustomed to a new teacher. In converse, the new teacher had to familiarize himself with the students, as well as with the program. This reflected as loss of valuable instruction time.
2. Pre-test results were not received until March, 1979. This represents 6 months into the year, or approximately (2/3) two-thirds of the school year completed. It would appear to be difficult to judge a pupil's needs without their pre-test scores, since such scores indicate performance levels, weaknesses, and stregths.

The analysis of the Data

The instrument used to measure the students achievement was the California Achievement Test. The statistical analysis chosen was the historical regression t-test design.

TABLE I

PRESCRIPTIVE LEARNING

HISTORICAL REGRESSION T-TEST DESIGN

(CALIFORNIA ACHIEVEMENT TEST)

GRADE	N	PRE-TEST MEAN	EXPECTED POST-TEST MEAN	ACTUAL POST-TEST MEAN	T	LEVEL OF SIGNIFICANCE	D.F.
2	60	1.5	2.5	2.0	3.87	.05	58
2	68	1.4	2.4	2.6	8.59	.05	66
2	32	1.2	2.2	2.5	11.18	.05	31
3	73	2.2	3.2	3.1	6.52	.05	71
3	52	2.4	3.4	3.8	10.23	.05	50
3	28	1.5	2.5	3.3	14.19	.05	27
4	19	3.0	4.0	4.6	11.28	.05	18

- 47a -

GRAPH 1

COMPARISON AMONG THREE

OBSERVATIONS FOR ACHIEVEMENT

GRADE 2-4

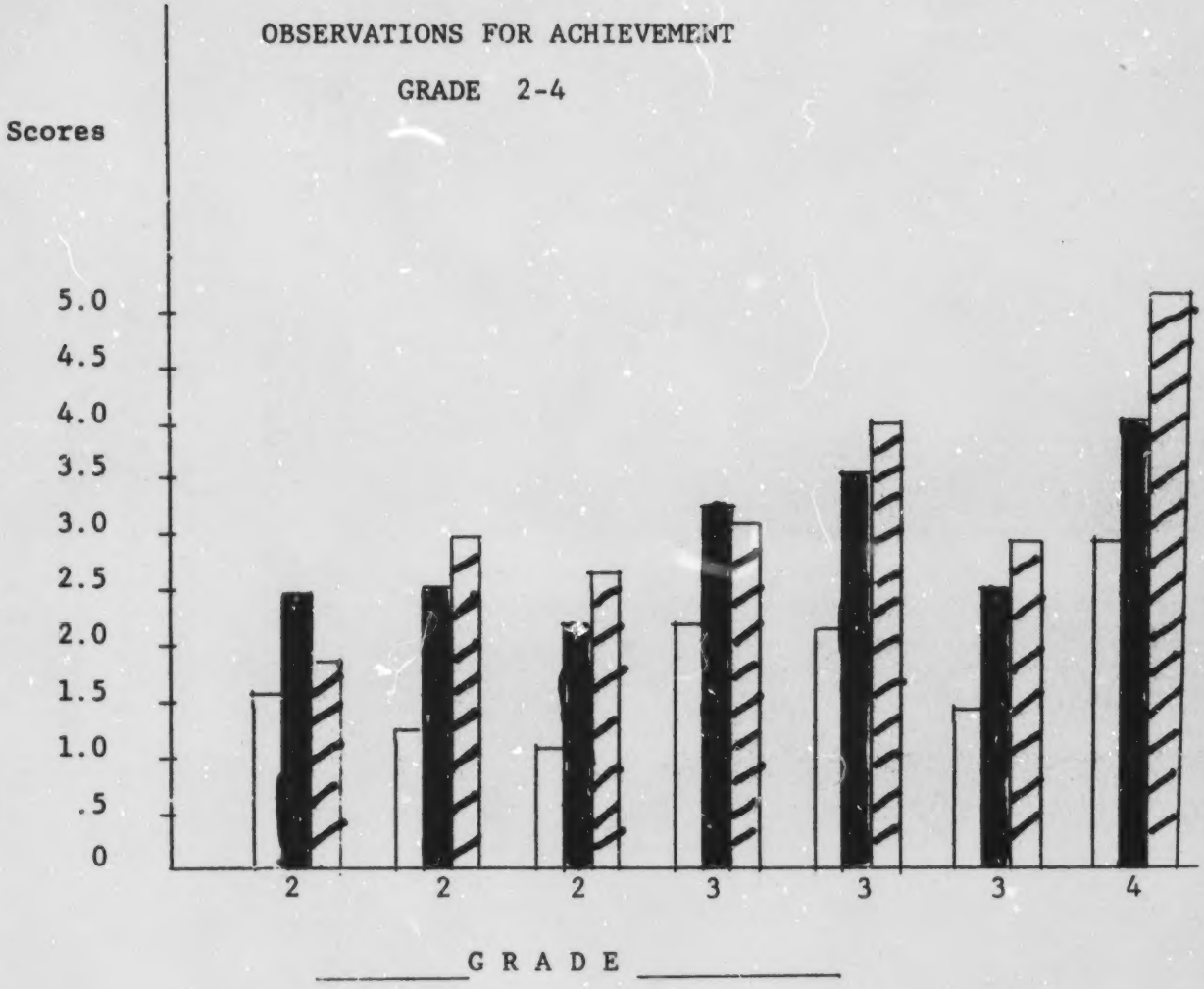


TABLE II

PRESCRIPTIVE LEARNING

HISTORICAL REGRESSION T-TEST DESIGN

(CALIFORNIA ACHIEVEMENT TEST)

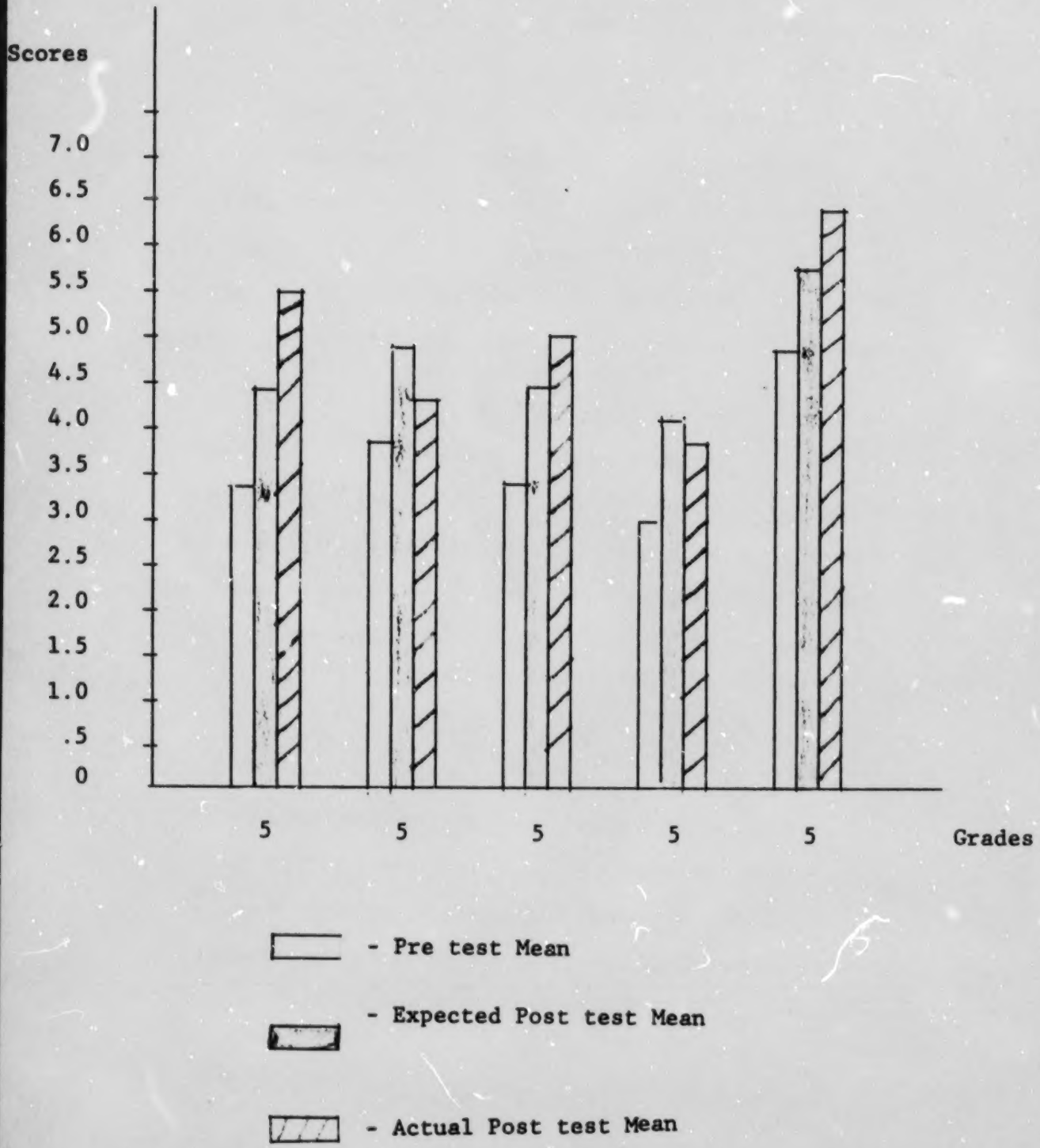
GRADE	N	PRE-TEST MEAN	EXPECTED POST-TEST MEAN	ACTUAL POST-TEST MEAN	T	LEVEL OF SIGNIFICANCE	D.F.
5	38	3.6	4.6	5.2	.88	.05	37
5	44	3.7	4.7	4.2	.47	.05	42
5	95	3.4	4.4	4.8	8.30	.05	93
5	38	3.2	4.2	3.8	4.44	.05	37
5	36	5.0	6.0	6.5	1.04	.05	35

GRAPH 2

COMPARISON AMONG OBSERVATIONS

FOR ACHIEVEMENT

GRADE - 5



Findings

In reference to the MacMillan component, a significant increase was evident in all grades, with the exception of one second grade. Six out of seven grades achieved increases, better than expected. This eventually compensated for the low achievement level in CES 229. The Think component experienced more difficulties than the MacMillan component, in that the achievement level was lower than anticipated in two out of five schools.

In reviewing Table 1., notice that the 5th grades were all less than two years below their grade levels.

Conclusions

Overall the program was considered fifty percent successful, as the result of the strong showing of the MacMillan component. A critical review of the Think component is advisable, given the limited achievement of those pupils involved with that component.

Recommendations

1. It is recommended that a continuous monitoring mechanism be introduced for the purpose of assessing proper program implementation.
2. It is recommended that a staff waiting list be formed, in an effort to promptly fill vacancies.

3. It is recommended that all testing and evaluating materials be issued and processed promptly.
4. It is recommended that the program as implemented at the individual school, be continuously reviewed and modified, as circumstances might require.

Function Number 5049-91627

WORKSHOP WAY PROGRAM

FINAL REPORT

TAX-LEVY YEAR 1978-79

An evaluation of a New York City School District educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1978-79 school year.

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research and Evaluation

Jerome Grosser
Coordinator, Workshop Way Program

AN EXECUTIVE ABSTRACT

WORKSHOP WAY PROGRAM

5049 - S1627

Jerome Grosser
Coordinator

Workshop Way, developed by Grace Pilon in Louisiana is an instructional reading program offered to pupils who demonstrate low achievement, lack of motivation, poor self-esteem and poor attendance Workshop Way is essentially a reading program, in grades 1-6, servicing 176 pupils, both individually and in small groups. The development of pupils as thinkers, learners, and persons of worth, were measured through the developmental stages as outlined in the Grace Pilon materials. The program's focus on attitude or self-esteem changes does not lend itself to numerical evaluation. The program functioned in the schools according to the proposal. Staff performance was rated highly especially in the affective domain, and a positive working relationship was generated between staff and students.

Function Number 5049-91627

WORKSHOP WAY PROGRAM

TAX-LEVY YEAR 1978-79

ESEA-TITLE I

EVALUATOR

Leanora Nelson

COORDINATOR

Jerome Grosser

Program Description

The Workshop Way (WW), was implemented in line with the project proposal during the academic year 1978-1979. The Workshop Way is a Title I, ESEA funded program in Community School District #9. The program was established last year in CES 4, and expanded to include CES 11 this year. The Workshop Way, developed by Grace Pilon in Louisiana, is an instructional reading program offered to pupils who demonstrate low academic achievement as indicated by standardized test scores, lack of motivation, poor self-esteem and poor attendance. Grace Pilon kits contain developmental and sequential lessons designed to instruct in word attack, structural analysis, and comprehension skills according to diagnosed weakness of the pupil. Built into the Grace Pilon materials are assessment tools which assess academic objectives, as well as psychological, physical and social goals. The purpose of the Workshop Way is to provide some measure of success to pupils who have demonstrated low academic achievement and to encourage them to succeed through a developmental process that focuses on attitude changes, feelings of worth, ability to think, and basic educational skill training. The Workshop Way is essentially a reading program in grades 1-6, servicing 176 pupils, both individually and in small groups of 15.

The participant/staff/ratio for Instructional sessions was as follows:

Student/Teacher - 8;1; Student Paraprofessional-8:1

Teacher/Paraprofessionals-1:1.

An implementation concern of last year (e.g., FY'77) was length of time allotted for instructional purposes. Modifications were made to shorten class periods as suggested in previous findings. An eight period day was adopted in the current year's design.

Implementation of Instructional Objectives

Several components describe the pedagogical methodology.

1. Materials, supplies and services were divided into the following categories:
   a. General Instructional Supplies - phonics kits, SRA kits, Grace Pilon materials, dictionaries, atlases and arts and crafts supplies used to implement the instructional program.
   b. Audio-Visual Supplies - cassette tapes, records and filmstrips provided independent reading activities.
   c. Clerical Aides - assisted administration in record-keeping and filing.
   d. Local Travel Carfare - furnished the means for visits to schools and professional conferences within the city.

e. Testing Materials - were supplied through the Grace Pilon materials.

f. Postage - used to communicate with parents and staff.

2. Special teaching techniques consisted of providing psychological support based on the Grace Pilon Workshop Way program as detailed in her book entitled, Self-concept and Reading. In addition, teachers created materials for testing and instructional purposes.

3. Classroom organization included the following:

To afford each youngster maximum services a team approach was utilized. A teacher and paraprofessional structured the classroom environment; pupils were enabled to freely exchange ideas and to improve upon communication skills. The open learning climate is inherent in the Workshop Way design. This atmosphere reinforces personal adjustment through feedback from others.

Pupils met individually with teachers who monitored the homework vocabulary project that is part of the sequential independent work-study skills as outlined in "Our Workshop Schedule".

Pupils were also divided into small groups for phonics or when special needs arose. The small group

maintained class standards, provided individualizing of instruction through instruction planned to comply with needs, through self rewarding techniques and follow-up. Each pupil involved in the project developed a sense of self esteem as indicated in the coordinator's report.

4. Pupil achievement in the Workshop Way program was associated with positive attitude change towards learning, ability to become self-directed or motivated , personal adjustment, and the acquiring of basic reading, writing, mathematics, and speaking skills.

   Factors which contributed to program success include: newsletters, regularly scheduled meetings with parents, which stimulated pupils to effectuate positive change in attitude towards school; self-acceptance of the "five freedoms" of Workshop Way: freedom of conversation, freedom of movement, freedom of location and position for work, and freedom of choice of materials and tasks.

5. Staff performance was rated highly particularly in the affective domain, according to the coordinator's summary. The students trusted staff who functioned as 'significant' in contributing towards their worth and value.

Since teachers and paraprofessionals were responsible for recording pupil progress and identifying weaknesses and potentials, this working relationship between staff and pupils contributed to the programs' conceptual success. The Coordinator felt both pupils and staff freely inquired and developed as they exchanged feelings and expectations.

The Workshop Way Staff participated in ongoing evaluation and planning. Emphasis was placed on personalizing and individualizing instruction. Workshop Way method is implemented through prescribed classroom activities, so it was necessary for staff to share successful approaches to reach desired academic, psychological, physical and social goals.

The original instructional staff consisting of teachers and paraprofessionals remained in the program and were able to identify procedures which helped to make the program a success. The coordinator noted through observation that the staff correlated positively with student growth, as well as identified with programs' objectives.

Findings

Tasks in the Workshop Way program were evaluated by teachers and pupils. Since pupils were encouraged interact with peers, willingness to exchange views was considered significant. The development of pupils as thinkers, learners, and persons of worth, were measured

through the developmental stages as outlined in the Grace Pilon materials.

The use of small groups for instructional purpose were viewed as advantageous and appropriate to both educational and humanistic objectives of the Workshop Way program.

A summary of the coordinators' on-going survey concluded that the Workshop Way had been introduced in those schools as indicated in the proposal description. Staff, (pedagogical and paraprofessional) functioned in those school as indicated in the proposal description and no problems had occurred that would represent a major departure from that specified in the guidelines.

The coordinator stated, "Student improvement generated Workshop Way staff to renewed commitment, dedication and belief in the value of the programs philosophy, psychology and instructional methods. This in turn, led to greater pupil achievement".

Recommendations

1. It is recommended that the program be recycled in 1979-80 Community School District #9 schools, in CES 4 and CES 11.
2. It is recommended that in light of the success of the Newsletter and regularly scheduled parent meetings that this method be adopted by the district to further positive parent participation and communication.

3. It is recommended that the eight period scheduling be continued, since this method has proven beneficial to staff and pupils.
4. It is recommended that Workshop Way pupils and staff be appointed alumni of the program in an effort to promote district-wide positive attitudes towards school and learning.
5. It is recommended that data on pupil academic and attendance records be made available for evaluation purposes.
6. It is recommended that the following measurements be modified for use in programs which focus on attitude or self-esteem changes:
   a. Coopersmith, S. Self-Esteem Inventory. San Francisco: W.H. Freeman and Company, C. 1967.
   b. Gough, H. and A.B. Heilbrun Jr. The Adjective Checklist. Palo Alto, California: Consulting Psychologists Press, C. 1965.
   c. Rotter, Julian and Janet Rafferty. The Rotter Incomplete Sentences Blank, New York: The Psychological Corporation, C. 1950.

   It is recommended that assessment scales used in the Workshop Way program be made available for evaluation purposes.

Function Number 5049-91629

STRENGTHENING EARLY CHILDHOOD

FINAL REPORT

TAX-LEVY YEAR 1978-79

An Evaluation of New York City school District educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1978-79 school year.

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research and Evaluation

Miriam Sour
Director, Strengthening Early Childhood

AN EXECUTIVE ABSTRACT

STRENGTHENING EARLY CHILDHOOD

5049 - 91629

Miriam Sour
Director

The methods and procedures used were directed toward each child's individual needs. There was a staff training program involving the various aspects of reading. Comparison of pre and post test data reveal an overall significant increase in scores. Based on the comparison of data, achievement in the third grade appeared to be greater than the second grade. Many first grade classes appeared to show exceptional progress with average increases of twenty-five points in raw scores. The S.E.C. program was found to be well organized, and successful in achieving it's objectives. Recommendations were made for earlier submission of test materials for scoring and smaller groups be established in the program.

Function Number 5049-91629

STRENGTHENING EARLY CHILDHOOD

TAX-LEVY YEAR 1978-79

ESEA-Title I

EVALUATOR

Theodore A. Davis

DIRECTOR

Miriam Sour

Implementation

The S.E.C. program did have difficulties in the beginning stages. The following is a list of the implementation complications, that deviated from the proposal.

1. Due to the extended absence of a paraprofessional (out with a broken leg) the program operated one paraprofessional short of the expected quota, until April, 1979.
2. It was discovered in one of the schools that the program for the second grade was implementing program guidelines improperly. Fortunately it was detected early in the school year (mid October), and adjustments were made.

   All of the preceding statements were based on the coordinator's narrative report, and monthly assessments, in reference to the project proposal.

Pedagogical, Methodology

The methods and procedures used appeared to be well executed, in that they were directed toward each child's individual needs. There seemed to be an abundance of materials that were available for instruction and student use. Materials used included audio visual supplies, tape recorders, and special library supplies. Unfortunately there were complications.

As stated in the coordinator's monthly reports, some pre-test scoring services were submitted late to the test-scoring center, (research tapes, and tape reels) therefore, they were returned at a late date. Also indicated was the problem of screening and placing children rapidly. It appears that the two preceding problems are some what similar, e.g., in the manner that certain procedures were expedited. Most directly, such could keep the children from receiving the type of individualized assistance they need. Overall the methods and procedures that were used were constructed well and geared the student toward achieving the project goals. There were just a few instances that the staff did not project the type of efficiency, that's needed to keep a program running smoothly.

Assessment of the Staff

The staff appeared to be capable, and qualified in spearheading this program. The coordinator's narrative indicated that the staff training program involved the various aspects of reading. It also pointed out that the majority of the teachers were state certified in reading. It revealed positive attitudes of the staff and reflected the positive attitude among the students, all of which convey a mutual respect for each other.

Despite the capabilities, the training, and the positive attitudes, there was a constant shortage of staff. This was due to various reasons. Reasons for this shortage were: Illnesses, staff members departing for other positions, and a shortage of staff from the onset of the program. This could only lead to staff members taking on additional responsibilities that could cause any competent staff to become lax in other areas. One can only hope that this would not impede, or effect the performance of the student in a negative way.

TABLE I

THIRD GRADE PRE- AND POST-TESTS

GE's, N COUNTS, AND DIFFERENCES

SCHOOL	PRE GE	N	POST GE	DIFFERENCES
2	1.8	39	2.7	.9
11	1.4	57	2.2	.8
28	1.4	55	2.2	.8
35	1.6	37	2.6	1.0
55	1.5	43	2.6	1.1
58	1.3	35	1.9	.6
63	1.6	44	2.5	.9
64	1.5	79	1.9	.4
70	1.3	35	1.9	.6
73	1.6	74	2.3	.7
88	1.4	25	2.8	1.4
90	1.6	47	2.0	.4
104	1.4	62	2.3	.9
109	1.6	64	2.6	1.0

TABLE I/Cont'd

	SCHOOL	PRE GE	N	POST GE	DIFF.
	110	1.6	46	2.2	.6
	114	1.7	37	2.6	.9
	163	1.7	31	2.6	.9
	229	1.4	31	2.4	1.0
Total	*18	***1.5	**839	***2.3	***.8

*Indicates the total number of schools used.

**Indicates the total sum of N counts.

***Indicates averages.

GRAPH I

PRE & POST ACHIEVEMENT PATTERNS BY SCHOOLS

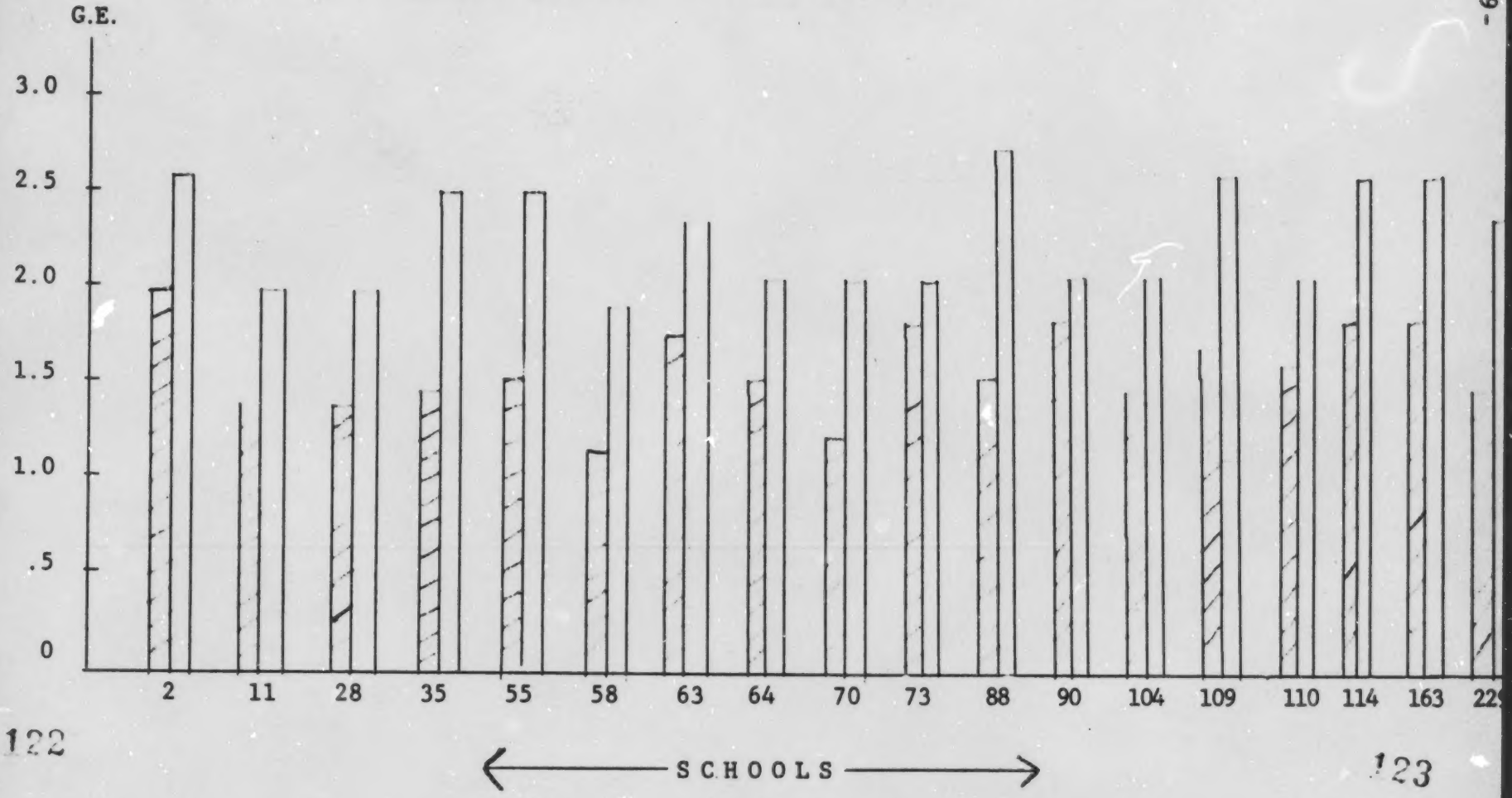


TABLE 2

SECOND GRADE PRE-AND POST-TEST GRADE EQUIVALENCIES, N COUNTS, AND DIFFERENCES

SCHOOL	PRE GE	N	POST GE	DIFF.
11	.9	19	1.5	.4
35	1.3	46	2.1	.8
55	1.2	18	2.2	1.0
63	1.3	15	1.7	.4
70	1.3	50	1.8	.5
73	1.1	48	1.5	.4
90	1.2	50	1.6	.4
104	1.1	42	1.6	.5
110	1.3	42	1.6	.3
114	1.2	41	1.7	.5
163	1.4	15	2.1	.7
229	1.1	28	1.9	.8
Total *12	***1.1	**386	***1.7	***.6

*Indicates the total number of schools used
**Indicates the total sum of N counts
***Indicates Averages

TABLE 3

STRENGTHENING EARLY CHILDHOOD

HISTORICAL REGRESSION T-TEST DESIGN

(C.A.T.)

GRADE	N	D.F.	PRE TEST	POST TEST	t	P
*2	386	770	1.1	1.7	25.22	.01
*3	839	1676	1.5	2.3	37.43	.01

*Both grades were computed on a group District basis.

GRAPH II

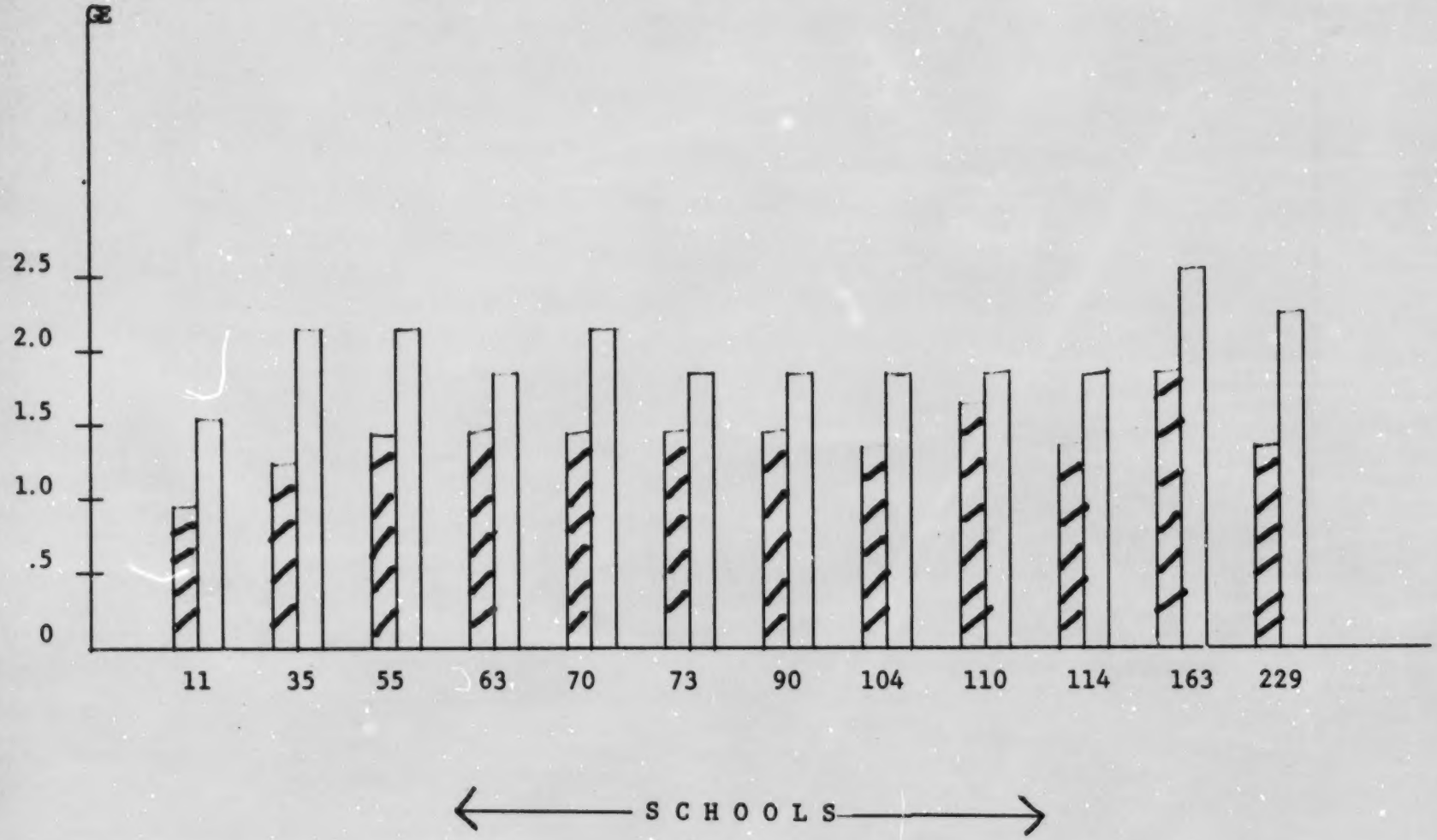

GE
2.5
2.0
1.5
1.0
.5
0
11
35
55
63
70
73
90
104
110
114
163
229
SCHOOLS
- Pre GE
- Post GE

TABLE 4

Table 4 - Simple Average Raw Scores for Both Pre-and Post-Tests, and Difference in Raw Scores - Grade 1

	SCHOOL	PRE-TEST MEAN R.S.	POST-TEST MEAN R.S.	DIFFERENCES
	2	69.0	107	38
	28	64.0	102	38
	35	83.8	109	25.2
	58	73.0	104	31
	64	69.0	97	28
	88	54.6	101	46.4
	90	80.3	104	23.7
	109	72.9	99	26.1
	110	83.4	103	19.6
	163	79.0	112	33
Total	*10	**72.82	**103.8	*30.9

*Indicates the sum number of schools

**Indicates simple averages (means).

TABLE 5

t-TEST OF SIGNIFICANT DIFFERENCES

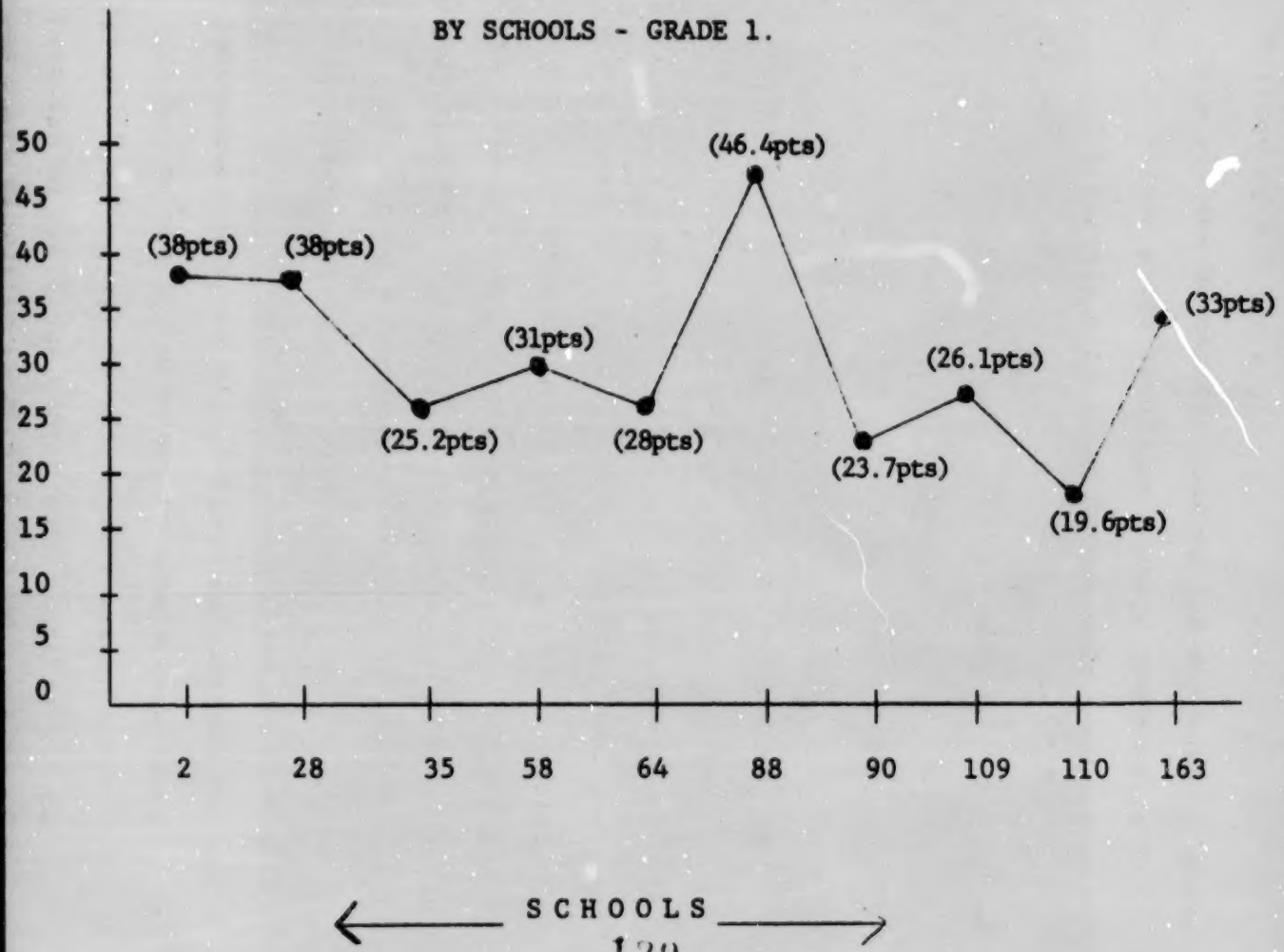
FOR MEAN SCORES

GRADE	PRE N	POST N	D.F.	PRE-TEST	POST-TEST	t	P
1	332	311	641	72.82	103.8	8.02	.01

GRAPH 3

COMPARATIVE ACHIEVEMENT INCREMENTS

BY SCHOOLS - GRADE 1.



Findings

Considering the large target population for the third grade, there appeared to be a significant increase in the grade equivalency score (e.g., t= 37.45, p. 01). All of the schools except three (CES 58, 64 and 70) appeared to show a consistent improvement of above 2.0 in grade equivalency for the third grade. Overall the program succeeded to a very good degree on the third grade level.

The second grade level consisted of a considerably smaller target population than the third grade (386 2nd grade students as compared to 839 for the third grade). Despite the smaller target population for the second grade level, achievement was not as great as the third grade. The total difference in the average grade equivalency was .6, compared to .8 for the third grade.

Despite the lower increase (by comparison) in grade equivalency by the second grade, the two grades do show consistency, in that most of the schools with third grades, at least produced a .6 level of increase and the second grades produced at least .4 level of increase.

The schools with first grades were analyzed on a comparison basis among the schools involved (e.g., Table 4), and an overall look at the achievement accomplished (e.g., Table 5).

The differential raw scores from the pre and post test results were variable (as shown in graph III). Despite the variable differences in the pre and post test scores, the lowest difference was 19.6 points which is a fairly good increase in the raw score. Many 1st grades appeared to show exceptional progress with average increases of twenty-five points or better (eight out of 10 schools). Approximately one-half of the schools with 1st grades, had average scores of (30) thirty points or more of increase in their final raw scores. With an overall total average of 30.9 points of increase in the raw score for the 10 schools, one would have to view the 1st grade level program as a very successful segment of the S.E.C. project. The average growth of 30 raw score unit represented a significant increase at a .01 level (e.g., t=8.02, p .01).

The S.E.C. project had significant increases in both the grade equivalency and raw scores. The project could have possibly been even more effective, with smaller groups, however, despite the large group counts, it achieved a very good degree of success.

Conclusions

The S.E.C. program was well organized, and achieved its objectives. A competent staff, which worked as a cohesive unit played a significant role in realizing the project goals.

Recommendations

1. It is recommended that test materials submitted are for test scoring services earlier in the school term.
2. It is recommended that smaller groups be established, to promote more individualized assistance for the students.

Function Number 5049-91633
5049-98723

JUNIOR HIGH MATH LABORATORY

FINAL REPORT

TAX-LEVY YEAR 1978-79

An evaluation of a New York City School District Educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the board of Education of the City of New York for the 1978-79 school year.

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research and Evaluation

Mark Fleischner
Coordinator, Junior High Math Laboratory

AN EXECUTIVE ABSTRACT

JUNIOR HIGH MATH LABORATORY

5049 - 91633
5049 - 98723

Mark Fleischner
Coordinator

The program was started late in the spring which precluded the use of a standarized achievement test. Instead the ICRT, a criterion referenced test was administered. The program operated for a total of 8 weeks and attempts were made to cover five skill areas in this timeframe. A good effort was put forth by staff and students despite the shortage of time.

Function Number 5049-91633
5049-98723

JUNIOR HIGH MATH LABORATORY

TAX-LEVY YEAR 1978-79

ESEA-TITLE I

EVALUATOR

Mr. Theodore A. Davis

COORDINATOR

Mark Fleischner

Implementation

In determining whether the program was implemented in line with the project proposal, the following comments are made:

1. Since the program started late in the Spring, it was necessary to preclude the use of a standardized achievement test, and instead, administer a criterion referenced test in its place.
2 Several of the schools reflected in the proposal, were apparently not involved in the program as intended. This fact is supported by an absence of ICRT test data, and any referencing to these schools by the coordinator (e.g., via the end-of-year narrative report).
3. Approximately 5 teachers for 5 schools were used, as compared to the expected 7 teachers for 7 schools. Due to the apparent elimination of two schools (as stated in statement #2), two additional teachers were probably not necessary, also for similar reasons the number of paraprofessionals was probably dropped from 14 to 10.

Pedagogical, Methodology

In reference to the materials used, the coordinator indicated that there were diagnostic tests used in prescribing the special needs for each

child; however, there were no references made on the type of materials used. It was also stated that each student received lessons on each skill needed, these lessons emphasized the use of manipulative materials in small groups. While instructional programs were presented, the period of time that the program operated (e.g., 8 weeks), the impact of the program would probably have been more dramatic, had more time been available.

There were small group sessions implemented (five or six students), which brought about more individualized instruction; however, the time element involved could well have been too large of an obstacle to overcome. Five out of an estimated twenty-four areas were emphasized, which appears to be very good considering the time span (8 weeks) involved.

Assessment of Staff Performance

Considering the circumstances under which the program operated, the staff appeared to perform well. Attempts were made to cover five skill areas, small group sessions were in existence, and even though lessons were performed hurriedly, it was basically because of the shortage of time. Teachers probably had to alter their teaching methods, and in doing so, they more than likely altered some if not many of their techniques. Despite these complications and conditions,

a good effort was put forth, and if any progress was made, credit should be given to the teaching staff, as well as to the student.

TABLE 1

PUPIL PERFORMANCE AS OBSERVED ON THE

INDIVIDUALIZED CRITERION REFERENCED TEST

NO. OF INSTRUCTIONAL OBJECTIVES	ATTEMPTS	MASTERED NO.	MASTERED %*	NEED REVIEW NO.	NEED REVIEW %*	NEED TO LEARN NO.	NEED TO LEARN %*
0129	2	0	0	2	100%	0	0
0130	2	0	0	0	0	2	100%
0131	2	2	100%	0	0	0	0
0132	2	0	0	2	100%	0	0
0133	2	0	0	0	0	2	100%
0134	2	0	0	0	0	2	100%
0135	2	0	0	0	0	2	100%
0136	2	0	0	0	0	2	100%
0137	2	0	0	2	100%	0	0
0138	2	2	100%	0	0	0	0
0139	2	2	100%	0	0	0	0
0140	2	0	0	0	0	2	100%
0141	2	0	0	0	0	2	100%
0142	2	0	0	2	100%	0	0
0143	2	0	0	0	0	2	100%
0144	2	0	0	2	100%	0	0
0153	995	55	6%	380	38%	560	56%
0154	995	182	15%	492	51%	324	34%

TABLE 1/Cont'd

NO. OF INSTRUCTIONAL OBJECTIVES	ATTEMPTS	MASTERED NO.	MASTERED %*	NEED REVIEW NO.	NEED REVIEW %*	NEED TO LEARN NO.	NEED TO LEARN %*
0155	995	26	3%	342	34%	627	63%
0156	995	764	72%	154	15%	77	13%
0157	995	601	61%	211	21%	183	18%
0158	995	364	37%	352	35%	279	28%
0159	995	28	3%	266	27%	701	70%
0160	995	107	11%	290	29%	598	60%
0161	730	160	22%	238	33%	332	45%
0162	730	70	10%	372	51%	288	39%
0163	730	283	39%	262	36%	185	25%
0164	730	32	4%	213	29%	485	67%
0165	730	448	62%	210	29%	72	9%
0166	730	98	13%	288	40%	344	47%
0167	730	43	6%	320	44%	367	50%
0168	730	19	3%	106	15%	605	82%
0281	4	0	0	2	50%	2	50%
0282	4	0	0	0	0	4	100%
0283	4	0	0	0	0	4	100%
0284	4	0	0	2	50%	2	50%
0285	4	0	0	4	100%	0	0

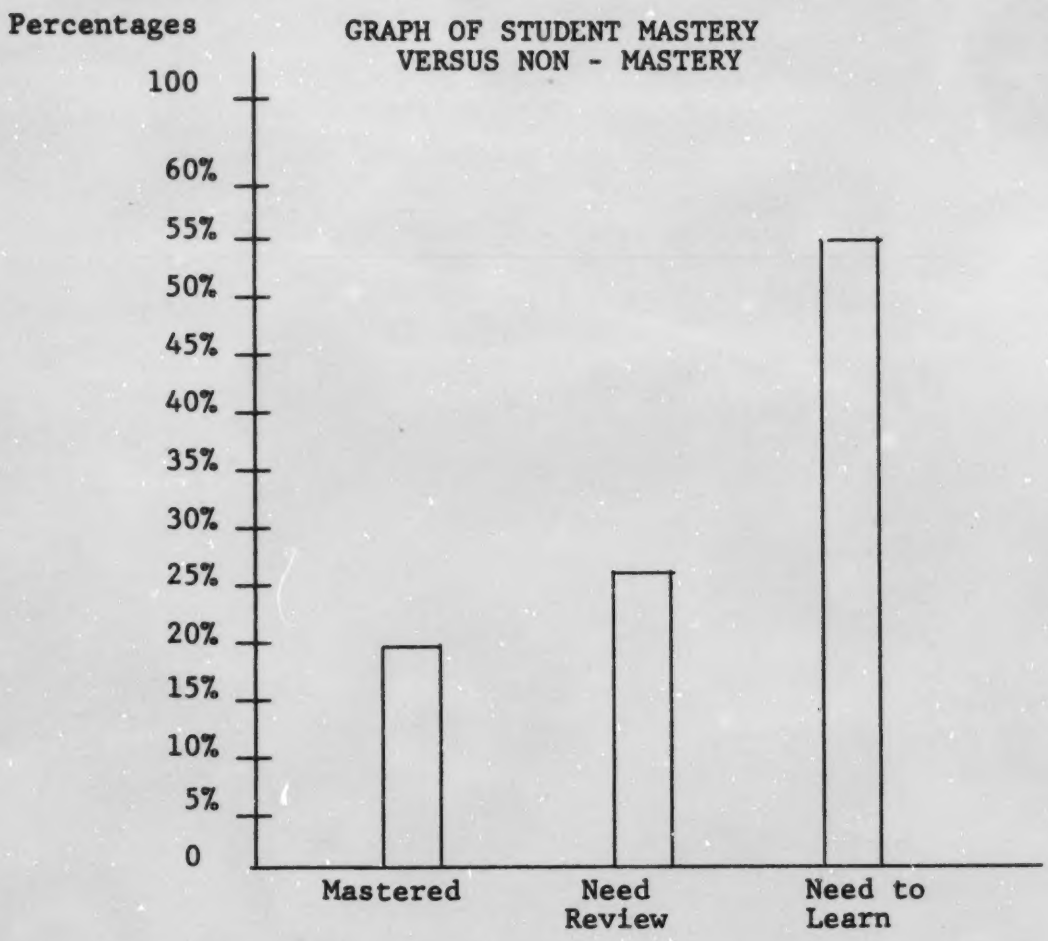
TABLE 1/Cont'd

NO. OF INSTRUCTIONAL OBJECTIVES	ATTEMPTS	MASTERED NO.	MASTERED %*	NEED REVIEW NO.	NEED REVIEW %*	NEED TO LEARN NO.	NEED TO LEARN %*
0286	4	2	50%	0	0	2	50%
0287	4	0	0	4	100%	0	0
0288	4	0	0	2	50%	2	50%
Total	13864	3288	20%	4517	25%	6059	55%

The preceeding table is a composite chart consisting of all of the classes in the program.

*All percentages listed represent averages of the corresponding numbers to the left of the column.

GRAPH 1


Percentages
GRAPH OF STUDENT MASTERY
VERSUS NON - MASTERY
100
60%
55%
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0
Mastered
Need
Review
Need to
Learn
Levels of Comprehension

Findings

In relation to project objectives pupil performance on the ICRT, did not show that these objectives were met. Students overwhelmingly showed a high percentage for skills they needed to learn. The percentage of students needing to learn skills, or uncertain of skills, was more than twice that of students mastering skills. It seems as though the teacher's judgement played a major role in the evaluations. Overall the largest constraint of the program was the fact that it started extremely late in the school year. This without doubt impeded student achievement more than anything else. More time would have resulted in a greater impact on the pupils, it would appear.

Recommendations

1. It is strongly recommended that the program start at the beginning of the school year.
2. It is recommended that all pre- and post-tests be administered.
3. It is recommended that the program be fully staffed.
4. It is recommended that all skilled areas be taught.

Function Number 5049-91628

ASSISTING STUDENTS WITH LEARNING DISABILITIES

FINAL REPORT

SCHOOL YEAR 1978-79

An evaluation of a New York City School District educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1978-79 school year.

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research and Evaluation

Richard Wallin
Coordinator, Assisting Students with
Learning Disabilities

AN EXECUTIVE ABSTRACT

ASSISTING STUDENTS WITH LEARNING DISABILITIES

5049 - 91628

Richard Wallin
Coordinator

The program was designed to improve the reading abilities of the learning disabled, on an individualized basis. The methodology used was based on a diagnostic approach, using the Wisconsin Design. To assess the programs objectives a comparison was made between the participant group and national reference group. None of the grades equaled the grade equivalency of the national reference groups, but there appears to be a consistency in the grade equivalent scores of the program group. There were no pre-test results. In an effort to project a clearer picture, a group of students that continued in the program from 1977-1978 was identified, and their post test scores from 1978 was substituted for pre-test scores. The observed achievement for this group was determined to be significant at a .05 level.

Function Number 5049-91628

ASSISTING STUDENTS WITH LEARNING DISABILITIES

TAX LEVY YEAR 1978-79

ESEA-TITLE I

EVALUATOR

Mr. Theodore A. Davis

COORDINATOR

Richard Wallin

147

Implementation

The ASLD project was designed to improve the (grades 4 thru 8) reading abilities of the learning disabled to a .05 level of significance. The intentions of the project was to provide individualized instruction based on word attack and comprehension (grades 4-6), with the individualization geared to each child's project career goal (grades 7-8). The proposal also indicates, that the instructional sessions were conducted on a small group basis, with approximately 15 students, 1 teacher, and 2 paraprofessionals. These sessions were on a 5:1 student-instructor ratio for a total of 45 minutes a day. The coordinator's end of the year narrative report indicates, that the program was implemented in line with the project proposal; however, additional information would have been useful concerning the implementation of the project to substantiate those observations reflected in the coordinator's annual report.

Pedagogical and Methodology

The project proposal specifies the use of audio-visual supplies, general instructional supplies, special instructional texts, as well as special library texts, tape recorders and film strips. The coordinator's narrative indicates the use of all of the preceding materials. It also states, that a committee was formed to discuss the possibility of reordering past materials,

and the ordering of new materials. In addition this committee also examined new materials, through presentations by education vendors. The idea of a supply committee appears to be very useful in the preparation for the upcoming year.

The methodology used was based on a diagnostic approach, using the Wisconsin Design Test, as indicated in the proposal and restated in the coordinator's narrative report. Sessions were conducted on a small group basis for individualized attention, plus individualized plans were developed in response to each child's needs. The coordinator's narrative report verified the presence of all of the methods described in the proposal.

Assessment of Staff

The ASLD program was fully staffed with 11 instructional teachers, and 22 paraprofessionals. It is indicated by the coordinator, that they were trained well, and most of the staff had at least 3 years experience in the program. The coordinator also stated that the staff worked as a cohesive unit. It appears that the staff performed above average and the impact on the students was positive.

Analytic Procedure

In an effort to assess the program objectives, it was considered informative if a comparison could be made between achievement as observed by both the participant group and national reference group. It would also be informative to determine the extent of achievement having occurred for the treatment group based on pre and post test results. The following is an attempt at making this determination.

Data Analysis

TABLE I

Program Achievement Comparison to National Reference Groups - Total Reading

4th Grade

SCHOOLS	N COUNT	POST G.E.	NATIONAL NORMS	GRADE	DIFF.
2	21	3.1	4.9	4	1.8
53	72	3.2	4.9	4	1.7
63	24	2.6	4.9	4	2.3
73	40	2.5	4.9	4	2.4
104	14	4.0	4.9	4	.9
114	47	3.3	4.9	4	1.6
Total 6	**228	*3.1	*4.9	4	*1.8

5th Grade

2	32	3.1	5.9	5	2.8
63	22	2.6	5.9	5	3.3
73	36	2.9	5.9	5	3.0
104	16	4.5	5.9	5	1.4
114	19	4.0	5.9	5	1.9
Total 5	**125	*3.4	*5.9	5	*2.5

TABLE I/Cont'd

6th Grade

SCHOOLS	N COUNT	POST G.E.	NATIONAL NORMS	GRADE	DIFF.
2	24	3.8	6.9	6	3.1
63	20	3.9	6.9	6	3.0
104	46	6.1	6.9	6	.8
145	24	4.3	6.9	6	2.6
147	12	4.0	6.9	6	2.9
Total 5	**126	*4.4	*6.9	6	*2.5

7th Grade

145	28	4.8	7.9	7	3.1
147	26	4.9	7.9	7	3.0
148	67	4.7	7.9	7	3.2
Total 3	**121	*4.8	*7.9	7	*3.1

8th Grade

82	76	6.1	8.9	8	2.8
145	26	5.8	8.9	8	3.1
147	39	5.3	8.9	8	3.6
166	70	7.4	8.9	8	1.5
Total 4	**211	*6.2	*8.9	8	*2.7

**Indicates total sums *Indicates averages

TABLE II

HISTORICAL REGRESSION

t-TEST DESIGN

A.S.L.D. PROGRAM

SCHOOL	GRADE	PUPIL TESTED *PRE-TEST	PUPIL TESTED POST-TEST	D.F.	MEAN G.E. PRE-TEST	MEAN G.E. POST-TEST	t	LEVEL OF SIGNIFICANCE
2	5	7	32	37	1.6	3.1	6.50	.05
2	6	13	24	35	2.9	3.8	2.87	.05

*Spring, 1978 Test Scores

Findings

None of the grades in this program equaled the grade equivalency for the national reference groups; however, there appeared to be consistency in the grade equivalent scores of the program group.

All of the grades were within .9 grade equivalent year of each other in their respective grade levels, with the exception of 2 schools. These schools were CES 104's 4th grade, 5th grade and 6th grade, also CIS 166's 8th grade. These two schools' grade equivalencies exceeded their lowest grade equivalency peer, by at least 1.4 grade equivalent years and they tended to produce the highest grade equivalency in their respective peer group. CES 104 seemed to achieve exceptional success, as compared to its peer schools; however, this could possibly be attributed to its low case count for the 4th and 5th grades. Then again one must take into consideration the school's obvious continuous success for grade 6, in which it had the largest case count. Overall a strong consistency was evident in the achievement patterns among the participants.

Despite the apparent consistency shown in the post scores, a certain degree of speculation is involved concerning the degree of success the program had.

This is due to the absence of the pre-test scores, for without this data the most accurate description of the degree of achievement accomplished can not be determined, therefore one can only estimate, and wonder, how successful the program really was. In an effort to project a clearer picture of the situation, a group of students that continued in the program from 1978 through 1979, was identified. Their post-test scores of 1978 was substituted for their pre-test scores of the next academic year (refer to Table 2). The observed achievement was determined to be significant at a .05 level of significance for grades 5 and 6 in school #2. The grade equivalency for the 5th grade increased by 1.5 grade equivalent years and the grade equivalency for the 6th grade increased by .9 grade equivalent year, both of which constituted significant increases. These results would tend to favor the program's success, and reduce or limit speculative assumptions.

Conclusions

The assessment of the ASLD program is confounded by the absence of the pre-test scores as observed during the Fall term of 1978-1979 school year. It would appear by various accounts (e.g. coordinator's narrative report and an end of the year publication) that the program did operate effectively.

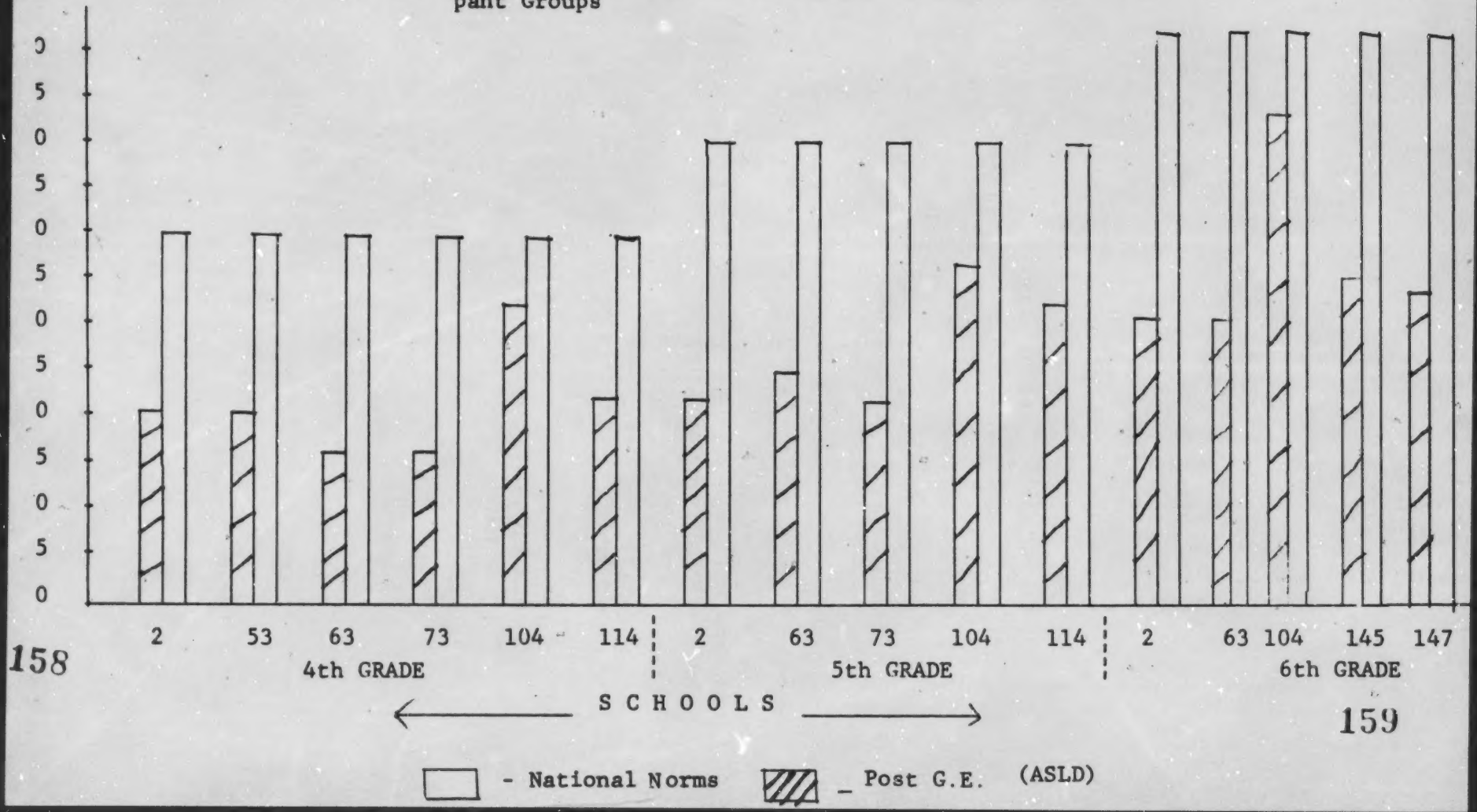
Recommendations

1. It is recommended that the school and class case count be distributed more equally.
2. On the basis of the sample achievement data the ASLD program should be continued during the 1979-1980 school year.

APPENDIX A

GRAPH I

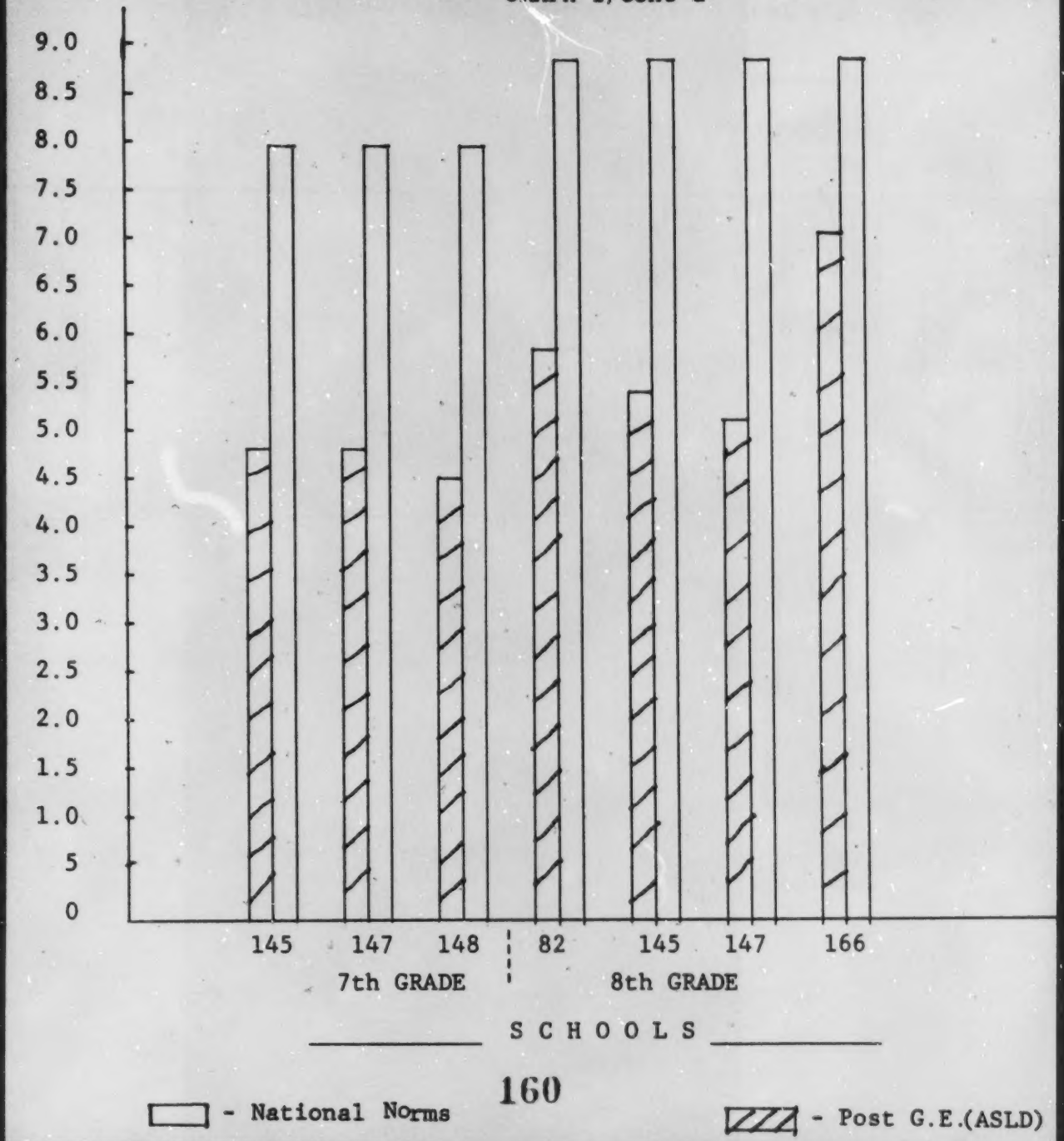
Graphs of the Post-Test Results Comparing Scores of the National Reference and Participant Groups



158

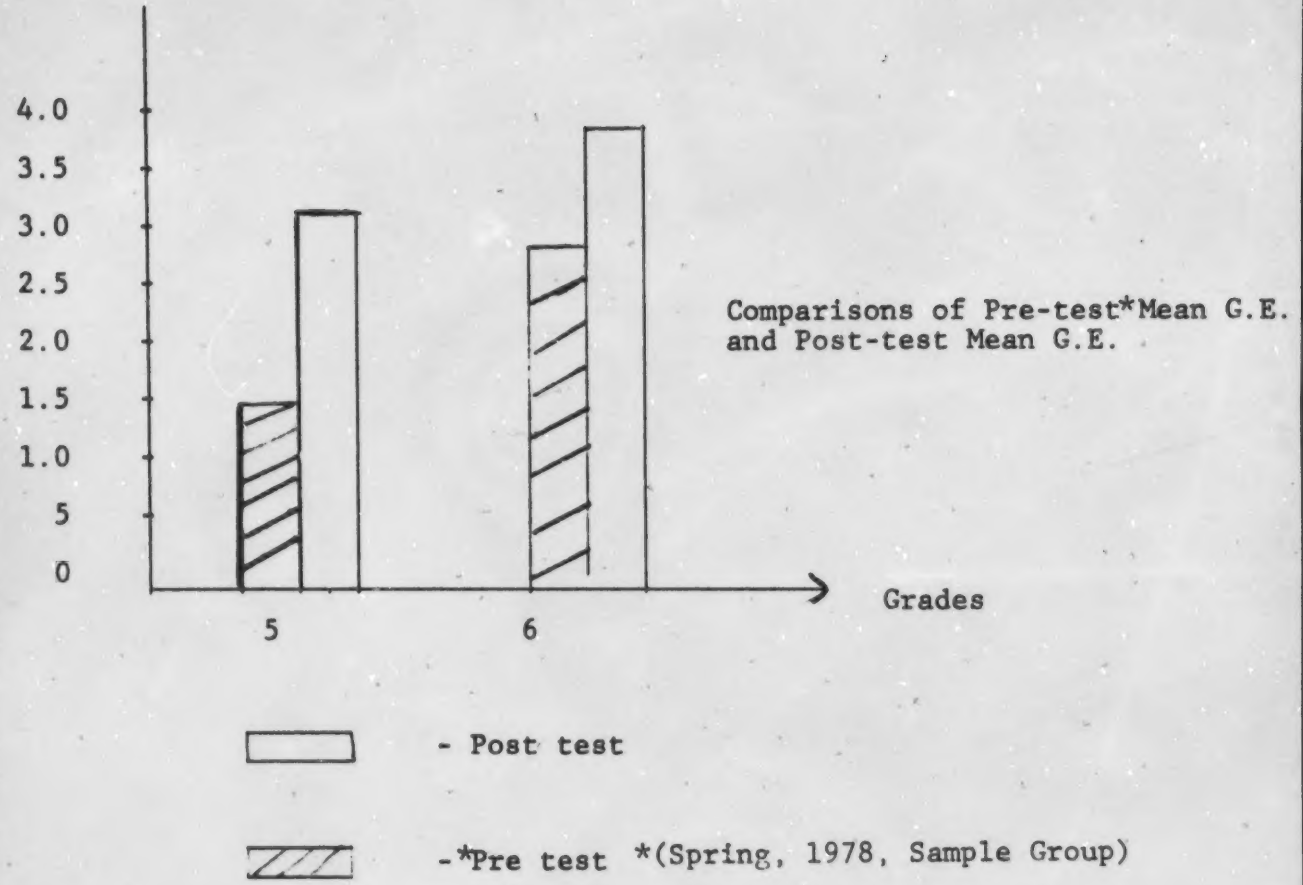
159

GRAPH I/Cont'd



APPENDIX B

GRAPH II



Function Number 5049 ~~5409~~-91632

ENGLISH AS A SECOND LANGUAGE

FINAL REPORT

SCHOOL YEAR 1978-79

An evaluation of a New York City School District educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1978-79 school year.

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research & Evaluation

Ruth Lowe
Coordinator, English As A Second Language

AN EXECUTIVE ABSTRACT

ENGLISH AS A SECOND LANGUAGE

5049 - 91632

Ruth Lowe
Coordinator

The programs objective was to demonstrate an increase in English fluency in the students by providing supplemental intensive instruction in English speech patterns using an aural/oral approach. It serviced 525 Spanish dominant students in 7 junior high schools. Language instruction varied; the audiolingual technique stressed listening and speaking skills followed by writing and reading. Another objective of the program was to foster an appreciation within the students of their bi-cultural existence. The California Achievement Test, which is primarily a reading achievement test, was used in a pre-post design. A recommendation was made to use another instrument that would measure language fluency.

Function Number 5049-91632

ENGLISH AS A SECOND LANGUAGE

TAX-LEVY YEAR 1978-79

ESEA-TITLE I

EVALUATOR

Valerie Moss Washington

COORDINATOR

Ruth Lowe

Program Description and Methodology

The objective of the English as a Second Language Title I program was to demonstrate an increase in English fluency at the .05 level of significance in the Spanish dominant population. They were administered the California Achievement Test as a pre and post measure of reading achievement.

The English as a Second Language Program provided supplemental intensive instruction in English speech patterns using a aural/oral approach. It serviced five hundred twenty five (525) Spanish dominant students in seven (7) junior high schools in grades six through nine (6-9). The staff consisted of seven (7) teachers seven (7) educational assistants, and the family workers who acted as liaison for the school and home. Part-time typing services were provided. Each team of a teacher assisted by one paraprofessional provided English as a Second Language (ESL) instruction to seventy five (75) students in groups of fifteen (15) for forty five (45) minutes, five (5) days a week.

A diagnostic/prescriptive approach to learning was used. Teacher made tests, conferences, observations, and previous test scores were gathered and analyzed. Language problems were identified and categorized. Profiles of each student's needs were prepared and prescriptions for remediation were written. Group instruction was based on the common needs of children.

Language instruction varied. The audiolingual technique stressed listening and speaking skills followed by writing and reading. Fostering positive ethnic-cultural identity and preserving native language and customs, in addition to developing an appreciation and understanding of the English speaking community were basic parts of the instructional program. Teachers planned and implemented units emphasizing this bi-cultural existence.

Instruction was done primarily by the teacher to small groups whose size varied depending on need. Additional reinforcement of instruction was then handled by the educational assistant on an individual basis.

In order to provide a multisensory approach to English as a Second Language, audiovisual materials were used. Commercial software (textbooks, workbooks, skills charts and duplicating masters) and hardware (cassetts, viewflex, tape recorders, and earphones) were utilized. Teacher-made materials to meet specialized and individualized needs of program units were used extensively.

Teacher training in English as a Second Language (ESL), using a workshop approach and using resource personnel (state Education Department and Office of Bilingual Education) was one important aspect of the program. As a result of these, the staff did acquire

knowledge about new approaches to teaching ESL and were able to be innovative and creative.

Evaluative Procedures

The Language Assessment Battery Test was used to identify the target population, Students scoring below the 20th percentile were eligible for the program. The California Achievement Test, Form C, levels 10-14 were utilized as pre and post assessors to measure the increase in English fluency with .05 as the level of significance.

The part of CAT used, measured reading ability (phonics and structural analysis, reading vocabulary and reading comprehension). The subtests related to language (mechanics and expression) were administered as post tests only. Therefore, there is no basis for comparisons about increased language facility. The stated objective of the program was behavioral change in the area of English fluency (ESL), but the instrument used measured increase in reading ability. The methodology employed was primarily aural-oral: listening and speaking preceding writing and reading. The use of a reading skill based instrument in a program whose primary goal is language development and which focused on 1) remediation of oral language and 2) fostering cultural identity and ethnicity provides no indication of the success of the program in achieving its goal. Basic reading skills were developed as

pupils wrote and read what they wrote, but that was not the primary focus of the program. A test in reading achievement will not accurately reflect the student's growth in oral language fluency.

As Table 1 shows, some increase in grade equivalent scores occurred. In all grades, except grade 5, a different, higher level of the test was administered for the post test. The interval between tests varied from 3-4 months. Because of the foregoing, appropriate comparisons can not be made nor conclusions drawn based on grade equivalents.

However, as Table 2 and Graph 1 show, the mean normal Curve Equivalents do indicate that all grades except grade 7 increased in reading achievement. Grade 6 shows a minimal decrease of 0.1. The mean NCE difference of 2.6 is distorted by much greater increase in grade 7 and 9.

Reading achievement and increased English fluency are not synonymous and therefore statements regarding the effectiveness of the program in attaining its objective, using that type of measure would not be accurate.

Table 1

English as a Second Language

Analysis of Reading Scores

(California Achievement Test)

:ade	Form Level	N	Pre-test Mean Raw Score	Pre-test Mean Grade Equivalent	Form Level	Months in Program	Post-test Mean Raw Score	Post-test Mean Equivalent	Difference Raw Score	Grade Equivalent
5	12C	6	3.0	1.7	12C	5	37	2.0	7.0	0.3
6	12C	93	34.1	2.0	11C/12C	8	54.3	2.2	20.27	0.2
7	12C	134	47.6	2.6	13C	4	46.2	3.0	-1.4	0.4
8	12C	118	51.8	3.0	13C	5	50.2	3.3	3.3	0.3
9	12C	11	59.0	3.4	14C	4	38.7	4.5	-20.3	1.1

However, as Table 2 and Graph 1 show, the mean Normal Curve Equivalents do indicate that all grades except grade 6 increased in reading achievement. Grade 6 shows a minimal decrease of 0.1. The mean NCE difference of 2.6 is distorted by much greater increases in grades 7 and 9.

Reading achievement and increased English fluency are not synonymous and therefore statements regarding the effectiveness of the program in attaining its objective, using that type of measure would not be accurate.

Table 2

English As A Second Language

Analysis of Reading Scores

(California Achievement Test)

Grade	Form Level	Mean NCE Pre-test	Mean NCE Post-Test	Difference Between Means
5	12C/12C	3.6	4.8	1.2
6	12C/11C,12C	4.8	4.7	-0.1
7	12C/13C	5.1	8.4	3.3
8	12C/13C	6.1	7.7	1.6
9	12C/14C	6.2	13.4	7.2

GRAPH 1

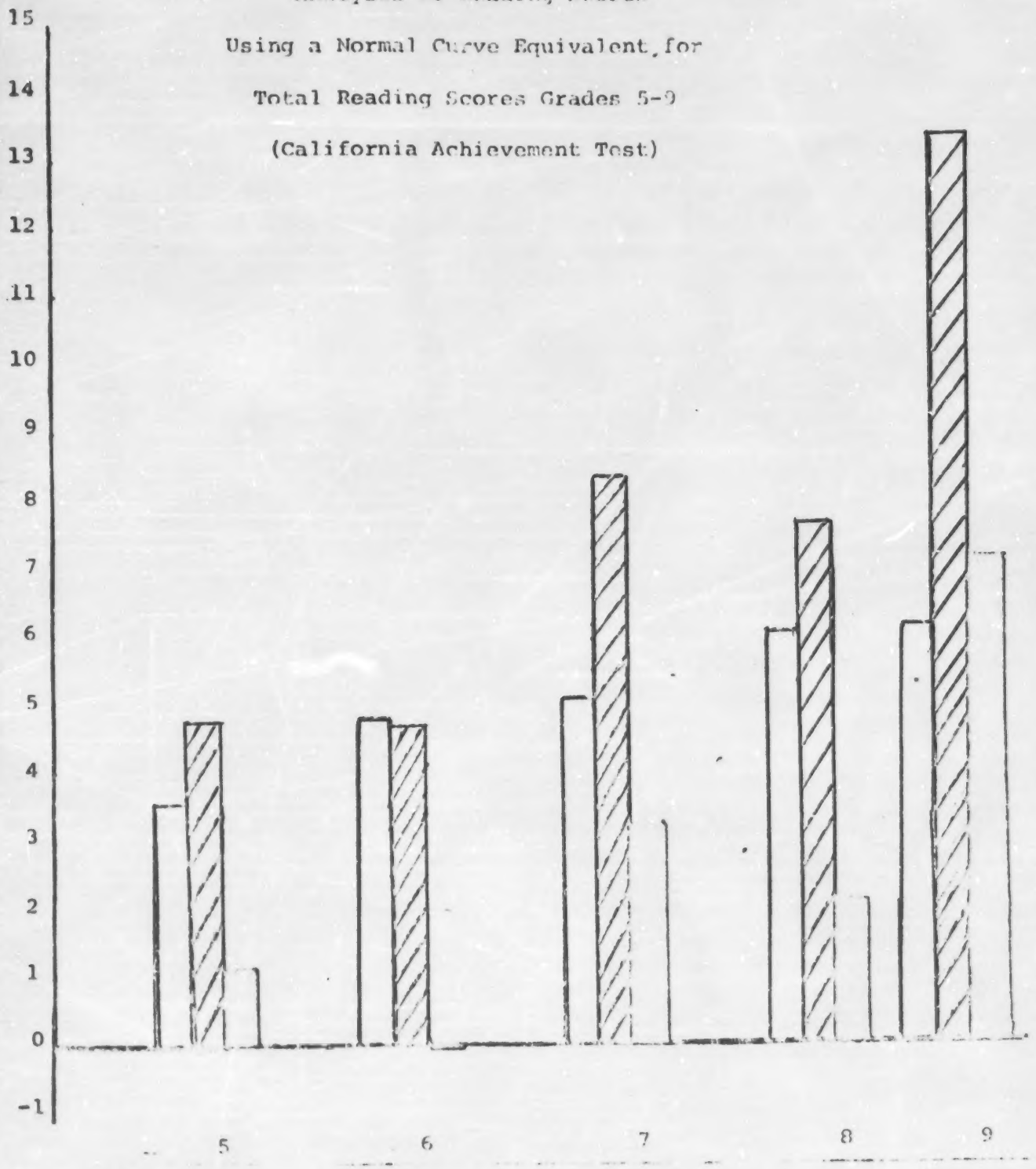
English as a Second Language

Analysis of Reading Scores

Using a Normal Curve Equivalent for

Total Reading Scores Grades 5-9

(California Achievement Test)



Implementation

The English as a Second Language Program was implemented according to the specifications as outlined in the project proposal. However, more information about the ongoing implementation and evaluation of the various program components from all participants (teachers, educational assistants, and students) is needed. Since non-traditional materials and methods were used, it is necessary to measure their effectiveness by other than traditional instruments which may not accurately assess their success and the level of student growth.

The program coordinator noted an area of difficulty:

1. Utilization of resource agencies (State Education Department and Office of Bilingual Education) for workshops.

The program coordinator did not comment on the effects of the program on student achievement nor on teacher performance. There was no indication of evaluation of the program by teachers, paraprofessionals, students or parents.

In spite of the possible effects of the following on the program's success, there is no indication of the attitudes, or interaction of any of the following:

Tax Levy Teachers	Family workers
Title I Teachers	Parents
Paraprofessionals	

Conclusions

1. Test data does indicate an increase in reading ability (NCE).
2. Instrument used (CAT) does not measure increase in English fluency.
3. Paraprofessionals have excessive lateness and absence record.

Recommendations

1. Greater participation in planning and evaluation of program by coordinators, teachers paraprofessionals and students involved.
2. More clearly defined and specified listing of objectives and procedures for evaluating their attainment. These should relate to the area of behavioral change (Language-English Fluency). Rather than a standardized instrument, since teachers develop language profiles for each child, these along with teacher made tests for specific areas of language achievement should be used, e.g. verb-tense and noun matching, use of possessive, etc. A program emphasizing oral language development using an oral-aural approach should be measured according to increase in language facility not reading achievement.

3. If the ethnic/cultural aspects of the program are secondary objectives of the program, their use as teaching tools should be evaluated. Their effectiveness in helping children to maintain and/or develop cultural identity should also be evaluated.
4. Workshops for training staff, both teachers and paraprofessionals should be continued.
6. Testing should be done uniformly throughout the district for all classes in a particular program in order to increase the effectiveness of the pre-test/post-test format and the interpretations made and the conclusions drawn from the test data.

READING AND MATHEMATICS (RAMS) 1979 SUMMER PROGRAM

FINAL REPORT

SCHOOL YEAR 1978-79

5001-09-01603

An evaluation of a New York City School District educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1978-79 school year.

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research & Evaluation

Lois Desvigne
Administrator Summer Program

&

Leroy Watkins
Coordinator, Summer Program

AN EXECUTIVE ABSTRACT

READING AND MATHEMATICS (RAMS) 1979 SUMMER PROGRAM

5001
~~5049~~ - 09-01603

Leroy Watkins
Coordinator

The summer program was to address the problem of achievement in reading and math. The project encouraged participation particularly of children who had been held-over, non-English dominant, and those previously enrolled in title I programs. The ICRT/Educational Progress of criterion referenced testing was utilized. On the basis of the test, 10 objectives not yet mastered was identified for each child. Students were retested in the sixth week and the program analysis was based on 60% of the students mastering the 10 objectives in reading and mathematics. It was reported that 44% of the students tested mastered 2/3 of 10 objectives in reading, and 55% of the students tested mastered 2/3 of 10 objectives in mathematics. The evaluator mentions the closeness of the administration of pre-post testing; there really wasn't a 6 weeks period of instructional time between the test administrations. The attendance was noted as excellent for the program.

READING AND MATHEMATICS (RAMS) 1979 SUMMER PROGRAM

TAX-LEVY YEAR 1978-79

ESEA-TITLE I

EVALUATOR

Jane Ann Smith, Ph.D.

ADMINISTRATOR

Lois Desvigne

COORDINATOR

Leroy Watkins

Statement of the Problem

The fundamental problem addressed by the RAMS (Reading and Mathematics) Summer Program was improvement of achievement in reading and mathematics for students in Elementary, Intermediate, Junior High and non-public schools in District 9. The Project encouraged participation particularly of children who had been held-over, non-English dominant students, and those previously enrolled in Title I programs and identified as in need of further remediation.

The specific questions for which answers will be sought are:

1. Using the ICRT/Educational Progress system of individualized diagnosis, prescribed instruction and tests for mastery will:
   a. 60% of the students achieve mastery of 2/3 of 10 objectives chosen by teachers from those identified by pre-test as not yet mastered (need to review and/or need to learn) in Reading?
   b. 60% of the students achieve mastery of 2/3 of 10 objectives chosen by teachers from those identified by pre-test as not yet mastered (need to review and /or need to learn) in Mathematics?

Additional questions will be explore in this evaluation as follows:

2. To what extent did students represent the age groups

and need categories identified in the proposal?

3. What are the effects of additional help to teachers-usually 2 paraprofessionals and up to 5 student aides per class?
4. What use was made of adjunct activities-projects trips, movies, graphing and problem solving in math classes, availability of breakfast and lunch programs in buildings?
5. What problems were identified by project personnel and evaluator? How might program be improved another summer?

Attacking the Problem

1. Number and Nature of Subjects

According to the ICRT pre-test printouts, somewhat more than 2600 students took that test in the second week in July. Other sources of data give slightly varying estimates of the number of students in the program; for instance, Student Summary sheets were submitted at the end of the program for 2398 students, and Home School Summaries list 2590 students. (Problems with data gathering with respect to various aspects of the project will recur throughout this report and some conclusions and recommendations will be presented. For the most part the problems seem to have been caused by ambiguous forms and requests for massive amounts of paper work.) All data indicate that participants exceeded the 2250 projected in the proposal.

The program took place in 18 schools, with four or

six classes in each school. 1794 students participated in another school; 417 students from 58 other public schools and 127 students from 24 non-public schools attended with groups larger than five students attending from 14 public and 6 non-public schools.

There were students from Kindergarten to grade 10 in the program. Table 1 shows the distribution of students by school and by grade level. The schools are identified by a letter rather than by actual number in keeping with Title I evaluation guidelines. (Schools 70, 104 and 166 were substituted for schools 4, 35 and 82 named in the proposal.)

Home School Summaries indicate that at least 531 students had been held-over. A substantial number of the students were non-English dominant and several schools had designated bi-lingual classes while others used the Spanish facility of regular teachers with Hispanic background as needed. In some schools the remainder of the children had been selected from those applying as the most in need of extra assistance in reading and/or mathematics; in other schools all students who applied were encouraged to attend.

TABLE I

Students - Distribution by Grade Level and School - RAMS 1979

SCHOOL	K	1	2	3	4	5	6	7	8	9	10	NO. GRADE	TOTAL
A							54	31	17			1	103
B		7	17	32	23	32	12					6	129
C		32	42	47	19	22							162
D		15	34	36	44	23	15						167
E	3	12	18	17	22	21	11						104
F	6	19	11	40	14	18	3						111
G		50	39	58	42	31	20	1				18	259
H		29	24	37	28	28	30						176
I		7	30	44	33	33						1	148
J	1	27	27	31	13	14	13					3	129
K		16	21	23	35	11						10	116
L		17	13	26	35	33	26	5				16	171
M			15	23	23	23	5						89
N				2	1	4	32	49	15		1	1	105

TABLE I /Cont'd

Students - Distribution by Grade Level and School - RAMS 1979

SCHOOL	K	1	2	3	4	5	6	7	8	9	10	NO. GRADE	TOTAL
O							9	55	17	2		4	87
P					5	16	28	42	17	1		8	117
Q	4	26	27	17	12	30	17	30	14				177
R		8	2	5	11	17	4					1	48
	14	265	320	438	360	356	279	213	80	3	1	69	2398

Note: These distribution figures come from ICRT Student Summary sheets which were completed for each student by the classroom teacher. Many classes included students from several grade levels. Neither ICRT printouts nor Home School Summaries, the other major sources of data available to the evaluator, include grade level information.

The information, including school totals, must be considered an approximation at best, since school totals show so many discrepancies with those obtained from Home School Summaries and estimated from available ICRT printouts(see Table 2).

TABLE II

Students - Reported and Estimated Numbers, Comparison of Data from Various Sources

Reported Hold-overs and CAT tests given

SCHOOL	TOTAL STUDENTS IN RAMS						HOLD-OVER	CAT
	ICRT STUDENT SUMMARIES	HOME SCHOOL SUMMARIES	ICRT PRINTOUTS ESTIMATE * Pre- R	Pre- M	Post- R	Post- M		
A	103	48	NA	(not available)			NA	36
B	129	225	151.6	145.6	98	66.8	NA	34
C	162	150	140.4	150.2	89.6	102.2	15	
D	167	168	NA				35	35
E	104	107	NA				20	13
F	111	107	NA				5	8
G	259	246	234	121.6	146	72	29+	26
H	176	230	212.6	185.4	165.2	145	19	19
I	148	158	169	NA	123	116	32	30
J	129	98	66	37	62	NA	16	5

TABLE II/Cont'd

Students - Reported and Estimated Numbers, Comparison of Data from Various Sources

Reported Hold-overs and CAT tests given

SCHOOL	TOTAL STUDENTS IN RAMS: ICRT STUDENT SUMMARIES	HOME SCHOOL SUMMARIES	ICRT PRINTOUTS ESTIMATE * Pre- R	Pre- M	Post- R	Post- M	HOLD-OVERS	CAT
K	116	135	125.6	184.4	71.2	105.4	19	17
L	171	182	168	168.6	103	109.4	44	18
M	89	134	NA				31	27
N	105	148	140	120.2	89	81.8	101	81
O	87	128	NA		74	NA	55	48
P	117	107	132.4	(115.4) partial?	86	92	18	16
Q	177	103	152.6	(74.0)	115	78.8	22	17
R	48	116	58.8	39	39.2	26.8	0	0
	2398**	2590**	2630.2	2344.8	1700.6	1580.4	531	496

* Estimates are based on 40 objectives/5 booklets per child Some students - particularly

Cont'd next page

1st graders and students with inadequate command of English - were not able to finish that many objectives. (Most of these students were excused from the post-test.) Thus, the estimate is a minimum.

**Close examination of data suggests that discrepancies in these two reports are frequently due to whether students with poor attendance were reported at all. If one took the highest figure for an estimate of maximum participation, total=2789.

2. Nature of staffing, scheduling, diagnosis, materials, instructional and adjunct activities.

A. The administrative staff of RAMS consisted of project director and project coordinator, one reading and one mathematics coordinator, a Title 1 liaison person, and 18 site supervisors, one for each of the 18 schools in which the program operated.

The instructional staff consisted of 90 teachers, half assigned to reading instruction and half to mathematics instruction, approximately 180 paraprofessionals with two being assigned to each teacher and student aides from two sources. One group of student summer employees, about 5 for each program site, were employed by the Title 1 program, specifically to assist in classrooms and office; the other group from Youth Employment Program (YEP) came with less specific duties, but some supervisors melded the two groups together, while others coopted some YEPS for RAMS Duty leaving others to custodial-type duties. One school reported a maximum of 42 teen-age helpers. Finally, program support to teachers was provided by 2 reading 2 mathematics teacher-trainers, and special assistance was provided at each site by the part-time services of family workers.

b. All students were scheduled to attend the RAMS program for 7 weeks, 4 days a week - Monday through Thursday, from 9:00 until 12:00. This period was divided into two 1½ hour sessions, one for reading and one for mathematics. On 3 days a week - Monday, Tuesday, and Thursday - there was an additional session from 1:00 until 3:00 which it was hoped about 1/4 of the students would attend for tutoring, skill reinforcement and for fun and activities; reported actual attendance varied from 57 in one school to only 4 regulars in another.

The schedule for all staff started at 8:30, with time for instructional planning and record-keeping scheduled from 8:30 - 9:00 and from 12:30. For the afternoon sessions, one teacher per site and all of the paraprofessional educational assistants and student aides were assigned. Wednesday afternoons were set aside for staff training.

c. Diagnosis of individual students' strengths and instructional needs was an integral part of the RAMS program. Individualized Criterion Referenced Tests (ICRT) were given in the first week of the program and individual student summaries showing objectives mastered, objectives needing review, and objectives needing to be learned were received by teachers in the second week. On the basis of this information, teachers identified 10 objectives not yet mastered in reading and 10 in mathematics as

the summer learning objectives for each child. (Since the ICRT program identifies 40 objectives/ grade level, in most cases, this would be the equivalent of approximately 1/4 of a year's objectives.) Students were re-tested in the sixth week of the program, providing direct evidence of mastery of the chosen objectives. In addition to such summative re-testing, ICRT provides Benchmarks, less formal tests by which both teacher and student may discover whether material taught has been learned.

d. Materials available varied by age/achievement level and between reading and mathematics classes. Reading materials included Audio Reading Progress Laboratory (ARPL) and CLUES, a magazine-like program for older students, both adjuncts to ICRT, and the Barnell Loft Specific Skill series. Some schools had other materials; for instance, one school used SRA phonics materials on hand from the school year and others augmented the programs with available reading and library materials. Supplementary needs, such as paper, crayons, glue needed particularly for younger children, were not supplied until late in the program.

Mathematics materials included Cuisinaire rods, several types of workbooks, and books of puzzles and logic problems.

Instruction with respect to ICRT-identified objectives was provided to individuals or small groups, and was to be provided to whole class groups only on the occasions when needs were congruent. In reading, specific skill instruction and practice were to be supplemented by writing and stories. In mathematics, supplementary emphasis was to be placed on graphs, on dimensional figures, and on experiences with puzzles and logic.

All classes were to complete projects that in some way supplemented skill instruction and were also fun.

Games were used primarily during afternoon sessions. The program had 3[illegible] films and two projectors available. Trips were planned for students in some schools.

While not an integral part of RAMS, breakfast and lunch programs were available to students at program sites.

3. Collection of Data

Sources of data include:

1. ICRT test data received by the project as computer print-outs, No computer generated pre-/post-comparison was ordered, so the evaluator has generated such comparisons as possible from district-wide summaries, and from site summaries provided by most of the the site supervisors.
2. Home School Summaries (form provided by RAMS office)

   These forms were completed by site supervisors summarizing student involvement and achievement for students' home schools.
3. ICRT Student Summary (form provided by RAMS office)

   A form was completed by teachers for each student, listing level of ICRT testing, objectives selected for instruction, and achievement.
4. Observation and Interviews

   The evaluator was employed at the beginning of the fifth week of the program and spent full-time during the last 11 days of the program visiting all 18 sites,

supervisors, teachers, paraprofessionals, and a few parents, children and student aides. The evaluator attended one staff training session, observed testing and interviewed the RAMS Coordinator, the Math and Reading Coordinators and Teacher-trainers. The evaluator had no part in the design of data forms, the planning or supervision of testing, or the decision on what data should be obtained from ICRT computer sources.

Evaluation - Analysis of Data

Only two specific objectives, both based on mastery of previously non-mastered ICRT objectives, were identified.

Objective 1: On the ICRT post-test, 60% of the students will demonstrate mastery of 2/3 of the selected reading objectives.

Objective 2: On the ICRT post-test, 60% of the students will demonstrate mastery of 2/3 of the selected mathematics objectives.

While the proposal says that each teacher will choose for each student 6-10 previously non-mastered objectives as the basis of instruction, teachers were instructed to select and did select 10 such objectives for each student. Analysis then will be

based on 60% of students mastering 2/3 of 10 objectives; since an individual student may achieve 6 objectives or 7 or more objectives and 1/3 of those mastering 6 objectives will be counted.

Potentially, the most valid source of achievement data is the ICRT printout. Table 3 shows the data available from printouts. There are several limitations on our ability to judge the achievement of objectives 1 and 2 from this data.

1. If each child completed 5 test booklets (a total of 40 objectives and 80 items), each objective would count for 2½% in reporting the percent of mastery. Not every child completed 40 objectives, particularly in the pre-test where many (but not an indeterminant number) were unable to complete the test.
2. Many fewer attempts (65% as many in reading, 67% as many in math) were made on the post-test than on the pre-test, indicating roughly that many fewer children being tested. Some of the difference is accounted for by 1st graders (279 Kind & Grade 1) who were not post-tested, and some by unknown number of non-English dominant students who were not post-tested; the remainder appears to be due to program dropouts.

3. Mastery indicated on ICRT printouts is related to the 40 objectives tested, not to the 10 objectives chosen by the teacher for instruction. In at least some cases, students, having learned to deal with this kind of test and having been exposed to instruction on at least some of the objectives, improved performance from near 0 mastery to near 100% mastery of all 40 objectives. (This information can be gleaned from printouts for individual students, and from a printout for teachers suggesting approximate instructional levels for class grouping. While the evaluator does not have available the printouts to examine all classes for such changes, one class in School J had 11 children reported as taking both the pre-and post - tests in mathematics and the mean improvement is 17+ objectives.)

Having cited the above problems with data interpretation, it still seems reasonable to attach educational significance to the almost unanimously positive, usually highly positive, changes in percentage of objectives mastered. Comparing the % mastery, pre- and post-, for reading z=37.9, for mathematics z-45.1, both indicating significant change at .01. It is less easy to feel assured about the exact mean number of objectives mastered, but rough estimate based on the assumptions

that the groups of students taking the pre- and post-test represent one population and that each student attempted 40 objectives is that the 9% growth in reading represents 3.6 objectives and the 11% growth in mathematics represents 4.4 objectives. Table 3 summarizes mastery of ICRT objectives as indicated by answer sheets submitted for computer analysis. Other children were tested using district-made answer sheets. These additional data, confounded in some cases with data from preliminary benchmark assessment, are part of the data reported in Home School Summaries and on ICRT Student Summaries.

Because it is not possible to evaluate how many teacher chosen objectives were mastered by individual students from the computer data - the analysis required to assess achievement of the RAMS objectives, the individual ICRT Student Summary sheets prepared by teachers for each student have been used as the primary source. These forms do not provide entirely dependable data, however. In some cases teachers have been clear about whether data reported is from benchmark assessment or formal testing, in some cases they have not. In a few cases they have not. In a few cases, whole classes have been reported as mastering 10 objectives and such uniformity of achievement appears unlikely.

TABLE III

ICRT - MASTER (FROM ICRT COMPUTER PRINTOUTS)

	READING							MATHEMATICS						
	PRE-TEST			POST-TEST				PRE-TEST			POST-TEST			
	ATTEMPTS	MASTERED #	%	ATTEMPTS	MASTERED #	%	%	ATTEMPTS	MASTERED #	%	ATTEMPTS	MASTERED #	%	%
DISTRICT	105,208	35,289	34	68,024	29,184	43	+9	93,792	28,606	30	63,212	25,785	41	+11
School B	6064	2156	36	3920	1615	41	+5	5825	2133	37	2672	846	32	- 5
C	5616	2279	41	3584	1788	50	+9	6008	2619	44	4088	2421	59	+15
G	9630	3074	33	5840	1995	34	+1	4864	1647	34	2880	1204	42	+ 8
H	8504	3593	42	6608	3456	52	+10	7416	2640	33	5800	2554	44	+11
I	6760	2601	38	4920	2261	46	+8	NA (Not Available)			4640	1643	35	
J	2640*	855	32	2480	1106	45	+13	1480	376	25	440*	344	78	
K	5024	1733	34	2848	1187	42	+8	7376	2154	29	4216	2158	51	+22
L	6720	1697	25	4120	1339	33	+8	6744	1935	29	4376	1784	41	+12
N	5600	1717	31	3560	1433	40	+9	4808	1283	27	3272	1153	35	+8
O	NA			2960	1150	39		NA						
P	5296	1828	35	3440	1411	41	+6	4616*	1262	27	3680	1363	37	+10
Q	6104	1749	29	4600	1749	38	+9	2962*	611	21	3152	888	28	+7
R	2352	799	34	1568	1037	66	+32	1560	401	26	1072	426	40	+40

Schools A,D,E,F,M did not submit school level printouts to evaluator

* = only partial data for the unit available for analysis

Occasionally, students are reported as having been given different tests for pre- and post-tests, apparently because the initial tests were at too high or too low a level; this change may make sense for gathering information for instruction, but it decreases the validity of program data. With these cautions, it can be reported that 44% of the students tested are reported to have mastered 2/3 of 10 objectives in reading (737 of 1660), and 55% (874 of 1596) of the students tested to have mastered 2/3 of 10 objectives in mathematics.

Data reporting mastery of objectives are reported in Table 4 for reading and Table 5 for mathematics. In most cases the number of students for whom test data are reported by teachers are quite comparable to the numbers estimated from printouts. Where the numbers reported by teachers are higher, it may reflect children tested using district-made answer sheets and scored locally, or it may reflect a few children who did not complete the tests (there was no time limit); when numbers reported by printouts are higher, it must reflect errors by teachers of failing to report some student data.

Other types of errors are apparent. For instance,

TABLE IV

MASTERY - ICRT OBJECTIVES - READING

SCHOOL	FROM ICRT STUDENT SUMMARY TESTED	OBJECTIVES MASTERED 7-10	6	2-5	0-1	% >6 2/3	FROM PRINTOUTS POST-TEST (ESTIMATE)	% CHANGE	MEAN ESTIMATED OBJECTIVES
A	92	45	9	31	7	52	NA		
B	98	63	18	12	5	70	98	+5	2
C	94	64	7	18	5	70	89.6	+9	3.6
D	135	36	13	60	24	30	NA		
E	72	38	10	19	5	57	NA		
F	73	31	11	30	1	48	NA		
G	113	20	13	54	26	21	146	+1	.4
H	112	17	12	54	30	19	165.2	+10	4
I	138	72	20	42	4	57	123	+8	3.2
J	69	42	13	14	0	67	62	+13	5.4
K	75	61	8	6	0	85	71.2	+8	3.2
L	124	3	6	55	60	4	103	+8	3.2
M	83	49	13	18	3	64	NA		
N	88	15	19	51	2	24	89	+9	3.6
O	51	24	6	11	10	51	74	NA	
P	98	43	2	45	9	44	86	+6	2.4
Q	107	21	10	69	7	22	115	+9	3.6
R	38	31	3	4	1	84	39.2	+30	12
District	1660	737	≥	6 2/3		44	1700.6	+9	3.6

202

203

teacher data indicate that only 4% of School L students mastered 2/3 of the Reading objectives while 85% of School K students mastered the same number; at the same time printouts reveal that both groups improved by 8% or approximately 3.2 objectives per student. In this case, returning to the original forms does not make it clear whether the teachers in School K completed the forms with benchmark data, giving falsely high results, and if they did, whether they understood what data the forms called for. Similarly, School L teachers may have made errors in reporting data, or they may have taught a few objectives so well that all students showed mastery of a similar small number, but very few of 6-10 objectives.

The evaluator also analyzed the data from Home School Summary forms with the intention of using this third data source as a check on the other two. However, a very large percentage of achievement data on these forms was uninterpretable, staff frequently having reported a single number of objectives mastered without identifying it as mathematics, reading or the sum of both and/or having reported numbers of objectives mastered ranging upward from ten.

TABLE V

MASTERY - ICRT OBJECTIVES - MATHEMATICS

SCHOOL	TESTED	FROM ICRT STUDENT SUMMARY OBJECTIVES MASTERED 7-10	6	2-5	0-1	% 6 2/3	FROM PRINTOUTS POST-TEST (ESTIMATE)	% CHANGE	MEAN ESTIMATED OBJECTIVES
A	76	43	12	19	2	62	NA		
B	85	15	17	44	9	25	66.8	-5	minus 2
C	102	69	7	23	3	70	102.2	+15	6
D	128	61	16	47	4	52	NA		
E	71	33	14	21	5	54	NA		
F	99	30	16	35	18	35	NA		
G	102	66	10	21	5	68	72	+8	3.4
H	114	17	12	60	24	18	145	+11	4.4
I	90	57	10	17	6	67	116	NA	
J	53	17	5	25	6	36	NA		
K	107	86	5	14	2	82	105.4	+22	8.8
L	96	34	9	38	15	39	109.4	+12	4.8
M	89	62	11	14	2	74	NA		
N	89	47	11	30	1	57	81.8	+8	3.2
O	62	55	5	2	0	92	NA		
P	96	49	9	34	4	84	92	+10	4
Q	33	17	2	11	3	55	26.8	+14	5.6
District	1590	874	-	6 2/3		55	1580.4	+11	4.4

(Number mastering 6 2/3 = number mastering 7-10 + 1/3 number mastering 6)

Thus, there is no evidence that the RAMS program objectives were specifically met, but there is compelling evidence that substantial learning took place in the 18 instructional days between pre-test and post-test. Observation of classes in the week after the post-test indicated that diligent work on identified objectives continued in many classes.

Two other comments on achievement data are in order. First, it appeared that students in the classes observed completed exactly the same test for pre- and post-testing, not the alternate form of the same test needed for validity. Second, an additional table, Table 6, has been prepared to summarize reading results in the major categories used in ICRT printouts. This table suggests reasons for some of the difference in reading achievement from school to school. Where the objectives tested and taught were more concentrated on the area of phonetic analysis, achievement was likely to be higher. That comprehension is more difficult to teach and to learn than phonics according to this data would probably not surprise any reading teacher.

Other data

Attendance was reported on ICRT Student Summaries and on Home School Summaries. ICRT Student Summaries indicate that 2122 students, or 88% of the students for

TABLE VI

MASTERY OF ICRT READING OBJECTIVES BY CATEGORY

SCHOOL	PHONETIC ANALYSIS				STRUCTURAL ANALYSIS				WORD FUNCTION SKILLS				COMPREHENSION			
	PRE-		POST-		PRE-		POST-		PRE-		POST-		PRE-		POST-	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
A	NA (not Available)															
B	765	41	598	52	515	43	383	49	272	39	183	40	604	26	451	29
C	1150	44	784	55	519	44	440	56	105	35	97	41	505	33	467	41
D	NA															
E	NA															
F	NA															
G	1404	36	944	40	625	36	391	35	327	37	202	37	718	25	458	25
H	1627	45	2047	61	729	46	521	50	344	49	270	54	893	34	618	36
I	1571	40	1381	50	497	41	444	47	137	52	115	56	396	29	321	32
J	187	45	457	61	234	42	292	49	162	35	105	39	272	23	252	29
K	896	45	637	51	274	36	179	46	195	34	130	43	368	22	241	27
L	420	30	389	53	339	31	285	42	300	32	214	35	638	19	451	21
M	NA															
N	218	46	134	52	312	39	229	45	429	39	367	51	758	24	703	34
O			92	68			166	43			305	46			587	33
P	255	48	214	57	352	45	273	53	376	40	292	49	845	28	632	32
Q	548	28	700	50	274	41	231	46	296	40	239	44	631	23	579	27
R	485	38	630	73	154	36	195	64	70	49	67	62	90	19	145	50
District	13445	48	11836	53	7103	40	5588	48	4630	38	3543	45	10111	25	8217	31
Change			+14%				+8%				+7%				+6%	

TABLE VII

EFFORT

SCHOOL	CATEGORIES PRESCRIBED E	S	N	OTHER CATEGORIES VG	F	P	U	OMIT
A	11	11	5		16	3		2
B	11	30	32		10	2		131
C	27	85	32		1		1	1
D	36	38	34		1			59
E	9	5	29		47	12	2	1
F	20	56	27					4
G	45	53	67		3		4	74
H	65	93	59					4
I	27	61	1		5	3	6	53
J	4	68	8			1	3	6
K	19	61	24		20			
L	16	81	73					
M	10	33	21	7	15			46
N	38	51	28			(Discharge 28)		
O	11	60	1				10	
P	17	71	8			1		9
Q	25	12	12		42	2	9	
R		116						

whom these forms were completed, attended RAMS for 15 or more days (this number was chosen somewhat arbitrarily by the evaluator as the minimum number of days for which achievement data would be analyzed). Most of the students remaining attended 20 or more days, with very large numbers having near perfect attendance. Attendance in some schools fell off during the last week, after post-testing. Several incentives helped to maintain attendance - planned trips, parties, and the offer of a special trip to a mid-town movie for students mastering most additional objectives. In most schools continued high attendance surprised staff and a good learning atmosphere was maintained. This, and the fact that in some schools students kept entering the program, support observations and teacher reports that the children enjoyed the program.

Effort was assessed on Home School Summaries. These data are reported in Table 7. One is tempted to speculate whether it was the students who behaved so differently at some schools than others, teachers who had different expectations, or whether the program was run in a more involving way so that children both tried and learned.

Observations and interview data re: other aspects Of RAMS program

A. Schedule

The morning sessions for students were almost

universally carried out as planned, with 1½ hours devoted to reading and 1½ hours to mathematics with a short break between sessions. The exception was one school where the teacher-trainer and the evaluator felt unsure that a mid-morning switch of teachers and classes was taking place (School R). Teachers and their assistants were observed frequently planning instruction and doing portions of the voluminous paper-work in the scheduled periods before and after the morning session. (It should be noted that in the final days of the program teacher and/or paraprofessional time was unavailable to many children because they felt obliged to do some of the paper work during class time.)

Afternoon sessions were not always well-planned and/or well attended. At one end of the continuum was School I which reported 57 average attendance and had planned a variety of activities through which the children rotated through the summer augmented by special events such as movies for everyone; even here it seemed that some of the activities were being done mostly by aides while the children watched. At School N the afternoon was mostly occupied with remedial help on specific school subjects, which may have been entirely appropriate for older children

who had been held back.

B. Diagnosis/Testing

Most staff felt that the availability of a diagnosis of specific educational needs for each child was a great asset for instruction in a short summer program. Some teachers of younger children disagreed, feeling that it would have been quite easy to identify 10 objectives suitable for the whole class or small groups within it; some of these children could not cope with the testing at all, so it was decided not to try to post-test 1st graders.

The major complaint about testing was that the pre-test was too late and the post-test too early. The pre-test printouts were not available until the second week of the program for anyone, and not until a week later for the last group tested. Post-testing was done at the beginning of the sixth week so that printouts would be returned in time to include data in final reports and children before the start of the program. Teachers should do some or all of the scoring by hand before sending the data to the computer so that

they could get started. The major problem with early post-testing is that it then evaluates only a portion of the program. The evaluator is concerned that care be taken to give alternate forms of the tests as pre- and post-tests. It is also not clear that teachers always choose the appropriate level at which to test each child; one wonders whether they had adequate information about the children on which to make this judgment.

C. Materials

Teachers of upper grade reading found the materials very good and had them available in adequate quantity, except in cases where no tape recorders were available for use with ARPL material. Teachers of lower grade, or slower children, found that the Barnell Loft materials at that level were not available . For the very youngest children, teachers had to use their ingenuity because appropriate materials were not available at all, or not until very late; teachers wanted storybooks, paper, crayons, glue, scissors, etc. Some teachers/site-supervisors were able to make use of materials already in the building.

In mathematics the problems seem to have been different. Younger children had Cuisinaire rods and work books to go with them; most classes of older children seemed to have appropriate workbooks and teachers to have books of puzzles and logic problems. An additional problem in mathematics is that materials were not cued into the printouts allowing the students to be self-directed to the same degree that they were in reading; and yet, some mathematics classes for older children were an incredibly busy, well-organized pursuit of individualized instruction. The math coordinator reported that it was harder to get teachers whose real expertise was in math, which may have accounted for some of the problems perceived.

D. Instructional and Adjunct Activities

Class size was a problem in some cases. In some schools more children registered than had been expected and the coordinator had made a decision that all should be encouraged to come because last year there weren't enough. In the most extreme cases, teachers were added; however, in the last weeks, some classes still had 35-40 children and teachers found it hard to individualize instruction.

Some teachers showed themselves masters of classroom

management, coordinating their own work with that of 6-7 paraprofessionals and student aides, so that every child got close attention. Others seemed to have little idea how to use the extra help effectively and tended to be annoyed with the presence of so many aides.

Mathematics classes were expected to add graphing activities and to work on problem solving and logic. Almost every classroom had displays of student graphs. The evaluator observed a lesson in one 5th grade class where the teacher was trying to get children to review what they had learned about graphs; they seem unable to respond to any of his questions. Several teachers hoped that the materials would be available during the school year (Mindbenders, etc.).

Many schools arranged to go on at least one trip but the arrangements were complicated by lack of money for admissions, difficulties about transportation and questions about available funds. The prospect of a trip in the last week was credited with keeping attendance up in some schools.

Movies available were used by several schools, particularly in the afternoons, but were judged by some site supervisors as 'not too relevant.' Available games were well-used in the afternoons at some sites. At least one school (School Q) had music sessions regularly in the mornings and several schools did quite a lot with art.

It would appear that the availability of breakfast and lunch at the sites was attractive to many children and their families. Not all children came for breakfast, but it appeared that almost all children stayed for lunch.

Special parties were arranged from time to time at some sites. On the whole, the program gave the appearance of a healthy combination of serious learning activities and fun - and maybe showed some children that learning is fun.

E. ICRT Program

Questions were raised by some of the more thoughtful educators about where a skill oriented program like ICRT fits into learning to read with comprehension, learning to write (some classes did a great deal of writing) and learning to think. There was a range of opinion expressed:

1) We should do ICRT all year, it's just what is needed to improve achievement,
2) ICRT is a terrible program, expecially not good for young children as they begin to learn to read,
3) It's a very good program for summer, because it lets you focus on specific objectives. The leadership people seemed to have a good understanding about what ICRT could and couldn't do and a well thought out rationale for use in a summer program.

The coordinator recognized weaknesses in planning for the needs of early childhood people this year, but felt that with more fore-thought they could be met next year.

Conclusions and Recommendations

1. Conclusions

   A. The available evidence does not show that the specific program objectives of 60% of the students mastering 2/3 of the 10 objectives chosen by teachers from those not mastered on the pre-tests in reading and mathematics have been reached. However, the evidence indicates that 44% of the students may have achieved this goal in reading and 55% in mathematics (the conclusion is qualified because of difficulties in assessing the validity of the data, as has been discussed). Additional evidence indicates that among all students tested, mastery of reading objectives increased by 9% and mastery of mathematics objectives by 11%. There has been substantial learning by students in the RAMS program. Since this learning took place, it is possible that the

program objectives would have been reached if post-testing had been done in the last week of the program, allowing 4-6 more instructional days (about 30% more time).

B. Attendance of most students was excellent. Students kept coming, and apparently word of mouth was positive encouraging some new registrants long after the beginning of the program. The observed atmosphere in most buildings and most classes was a pleasant one, busy and relaxed with few obvious discipline problems.

C. Some classes were too large to function effectively. In some cases the problem was primarily the size of the room which didn't allow space for separation into small groups for individualized instruction. In some cases teachers couldn't cope with the management problems of organizing 6-7 assistants to work effectively with the children. (Other teachers were able to make beautifully functioning learning groups involving everyone present in a mutually rewarding way -- even with 35 or more people in the room.) Training would help some, but

It is unlikely to change every teacher's style very quickly.

D. The required testing was carried out so that children seemed comfortable and business-like about it. However, it appeared that the same form of the test was used for pre- and post-testing, which might reduce the validity of measurement.

E. The paperwork demands on staff were voluminous. Completing the LEAPS forms with Benchmark data so that they could be completed prior to the return of the ICRT data seems only to supply data that will be inconsistent and therefore confusing. The ICRT Student Summary form requirements were understood in many different ways by different teachers, and the Home School Summary forms seem to have been completed hurriedly so that data was missing and/or inconsistent with that from other sources.

F. ICRT seems to have been an appropriate major element for the RAMS program, focusing efforts for a short, intense segment of individualized learning. The adjunct activities added variety and were well utilized by many teachers; some

teachers felt that the mathematics program had too many minor goals, diffusing the focus.

G. Almost all of the staff seems to have gone about their tasks with energy and good-will and surmounted a variety of problems in reasonably effective ways to deliver to the children who attended a program which helped them review some skills and learn a few new ones, comparable to what might have been accomplished in a similar number of days in the regular school year, in an atmosphere which made summer school a pleasant experience.

2. Recommendations

A. Continue to use ICRT as the major element of summer program, although perhaps not for the youngest children, except in modified form.

B. Continue to identify 10 objectives to be learned in reading and mathematics for each child. Even though not all children may reach the goal, it seems appropriate as a goal.

C. Explore all possibilities of pre-testing before school is out in June so that instruction could start immediately. Explore possibility of post-testing nearer the end of

the program. Take care that all children are tested at a level where they have some success, but also at a level which is not too easy for them. Be sure that parallel forms of tests are used for pre- and post-testing.

E. Have adequate materials and expendable supplies, as well as such hardware (tape recorders, etc.) as required, available for all grade levels at the beginning of the program.

F. Hire staff as early as possible so that pre-planning may take place. Consider providing more training at the beginning of the program, especially if many staff are again new to ICRT.

G. Set managable limits on class size, and thus limit registration if necessary. Room size may be as much a controlling factor as staff capabilities.

H. Communicate effectively with all staff. Training sessions should be planned with more care to meet the real needs of staff. If possible, the cadre of teacher-trainers should be increased again, both to provide training in instructional

methods and to provide more continuous liaison with administration and interpretation of program requirements. Memoranda should be made to keep excessive paper-work from draining time and energy that should go into instruction.

I. Make use of staff evaluation which was completed this year. While most staff at all levels seemed competent and energetic, a few site supervisors and teachers were observed who seemed less so.

J. Data for program evaluation seems to be available from ICRT. If closer examination shows that such information would correlate pre- and post-test results for individuals classes and schools - as seems to be the case, not to purchase such information seems false economy. It is not just the evaluator who must spend time to interpret less adequate data. Instructional time is taken from the children to prepare it.

A new Student Summary form is needed. It should allow teachers to put all relevant data re: an individual on one form as the primary source of data. It could then be copied as needed and/or needed data be extracted easily.

Function Number 5049-98722

STAFF DEVELOPMENT

FINAL REPORT

SCHOOL YEAR 1978-79

An evaluation of a New York City School District educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1978-79 school year.

COMMUNITY SCHOOL DISTRICT #9
1377 Jerome Avenue
Bronx, New York 10452

Jerome A. Greene
President, Community School Board

Dr. Roland N. Patterson
Community Superintendent

Hilda Gutierrez
Deputy Superintendent

Beryl Dorsett
Director, Title I

Dr. Edward N. Whitney
Director, Research & Evaluation

Nilda Soto
Coordinator, Staff Development

AN EXECUTIVE ABSTRACT

STAFF DEVELOPMENT

5049 - 98722

Nilda Soto
Coordinator

The program was designed to significantly improve teaching, and to raise the quality of instruction, thereby enabling pupils to achieve to their own potential. Since every Title I eligible child had not been programmed for Title I services, it was necessary to provide equal access to educational opportunity through the educational staff. The staff development component was characterized by a workshop approach and a one to one demonstration approach. Needs assessment data were submitted by the participants. The evaluation design involved the analysis of variance of the 1979 Standardized test scores between control and treatment groups. The control group consisted of classes in which the teachers did not participate in the program. The analysis established the fact that significant differences were observed between the two (2) groups, with the treatment group outscoring the control group by more than two (2) months. The analysis of specific grades indicate that the evaluation objectives had been realized for grade three and five, and not realized in grade four. The analysis also pin points specific sites where the project didn't have the effect desired. A suggestion is made for the program administrator to review possible factors contributing to the findings.

Function Number 5049-98722

STAFF DEVELOPMENT

TAX-LEVY YEAR 1978-79

~~BOBA-TITLE I~~
IMPACT AID

EVALUATOR

District Office of Research and Evaluation

COORDINATOR

Nilda Soto

Background

The staff development program Upgrading the Delivery of Educational Services through Staff Development was designed to provide a third and vital dimension of crucial training for staff in Community School District #9 who worked with Title I eligible children to break the cycle of inadequate performance. This vital dimension of comprehensive staff development was designed to significantly improve teaching and to raise the quality of instruction which will result in a more effective learning environment thereby enabling pupils to achieve in relationship to their own potential.

Community School District #9 is the largest Title I district in New York City. All but one school in the district are eligible for Title I designation, and all teachers have eligible pupils

in their classes. Since every Title I eligible child has not been programmed for Title I services, it is necessary to provide equal access to educational opportunity through the educational staff. The severity of the under achieving syndrome is widespread in the district schools. The contributing factors are so pervasive that the tax levy effort must be adequately reinforced and supplemented if Title I children are to have access to improve educational opportunities.

The existing skills of the staff need to be more sensitively attuned to the urgent learning strategies that have been developed to address these demands. The effectiveness of the application is dependent on training and retraining of staff on a very technical and uniform level. The Title I

schools are divided into eight feeder pattern groups with each of the junior high or intermediate schools as one of the eight nuclei. The program was to be composed of four components:

1. Component One - the Pupil Appraisal and Support Instruction Task Force focused on reading.
2. Component Two - the Pupil Appraisal and Support Instruction Task Force focused on Mathematics.
3. Component Three - Focused on language development, communication skills and mathematics in grades 1-3.
4. Component Four - the Auxiliary Task Force focused on upgrading and adapting existing skills of auxiliary personnel.

Program Implementation

The Staff Development and Reading components

of the proposal were implemented. The Mathematics Component of the proposal was eliminated due to lack of adequate personnel.

The Staff Development component was characterized by a workshop approach and a one-to-one demonstration approach being extensively used with participants. Various materials and audio-visual equipment were employed in the classrooms. The teachers were given the opportunity of borrowing the materials after they had been properly instructed in their use.

The needs of the various participants with regard to management, planning, grouping, content and human relations were discussed. Written self-needs assessments were distributed to the participants. Specific methods of improving their teaching performance were demonstrated, following the review

of the needs assessment data as submitted by the participants. Such lessons were jointly planned and taught. Participants were given the opportunity to analyze techniques employed by both the teacher-trainer and themselves.

Students benefitted by the orderly atmosphere established in the classrooms. The importance of routine, were continuously stressed with the pupils. The view of several participants was that the pupils were able to concentrate on their subjects more.

The staff were responsive to the needs of both pupil and teacher. They (the staff) were sensitive to the fact that they were present for the purpose of assisting and evaluating.

Evaluation Design

The evaluation design involved the use of a

control group as a basis for determining the extent of program effect observed on the treatment group. As the result of certain factors impinging on the district's ability to begin program operations (e.g., late funding, late program implementation, and the request by the SED for statistical analysis to conform with the analysis of variance procedure), the following will be restricted to analyses of standardized test scores between classes of the two groups of teachers. Another factor affecting the evaluation design was the exclusive reporting of the citywide reading and math test results, thereby precluding any language sub-test analysis.

Analysis and Finding

Objectives:

One: To provide the participant with varied

methodologies of instruction that can be used in the teaching of reading, mathematics, and language development in grades 1-8.

H_{R_1}: A significant difference between mean scores, as observed for the participant and control groups, at a .05 level, on a t - test, in the response patterns indicating staff knowledge of alternative methodologies, between random samples of participants and non-participants, of sample size not exceeding 25% of the participant group.

Finding:

For reasons cited as evaluation constraints, this objective could not be assessed. The attitudinal questionnaire (see Appendix A) was administered once to the treatment group,

and responses were consistently positive.

Objective Two: To introduce to selected staff, optional instructional resources provided by the district, that can be used to enhance the effectiveness of the classroom teacher in the instruction of reading, mathematics, and language development in grades 1-8.

H_{R_2}: A significant F will be observed, in favor of the participant group, at a .05 level, following analysis of variance between test scores of treatment and control groups.

Finding

The following analysis of variance summary charts between treatment and control groups 1979 standardized test scores, substantiate the fact of significant differences existing between these groups.

TABLE I

ACHIEVEMENT PATTERNS BETWEEN

TREATMENT AND CONTROL GROUPS

GRADE THREE - 1979

SUMMARY: ANALYSIS OF VARIANCE

SOURCE OF VARIATION	DF	SUM OF SQUARES	MS	SD
Among School Means	10	59.30	5.93	
Within Individuals	509	229.53	.45	.67
Total	519	288.83		

$$F = \frac{5.93}{.45} = 13.77$$

$t = 3.63$ $df = 509$

From Table F for

$df_1 = 10$, $df_2 = 509$

F at .05 = 1.88

F at .01 = 2.39

The above summary analysis establishes the fact that significant differences have been observed when the data have been viewed categorically. The mean achievement level for the treatment group at the end of the school-year, was 2.76 in grade equivalent units. The control group had a mean score of 2.55 in grade equivalent units. The treatment group out-scored the control group by more than two (2) months, and represents a significant difference at a .01 level (e.g., t-test of mean difference equalling 3.63, df = 509).

In reviewing the difference between groups at the individual school level, a clearer view is provided regarding relative program effect. Chart 1. provides an overview of these differences, with the accompanying implications as to where the Staff Development Program is having the desired effect or not.

CHART I

TESTS OF DIFFERENCES BETWEEN GROUPS BY USE OF THE t-TEST AT THE INDIVIDUAL SCHOOL LEVEL - 1979 (GRADE 3)

For df = 509, $t_{.05} = 1.96$, $t_{.01} = 2.59$

$$SE_d = .67 \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}$$

SCHOOL		MEAN	DIFFERENCE SIGNIFICANT AT THE .05	.01
CES 28	Treatment	2.6		
	Control	2.3	.53	.70
	Difference	.3		
CES 42	Treatment	2.4		
	Control	2.6	.44	.58
	Difference	.2		
CES 53	Treatment	2.7		
	Control	2.4	.27*	.36*
	Difference	.3		
CES 58	Treatment	2.1		
	Control	2.4	.51	.67
	Difference	.3		
CES 63	Treatment	2.2		
	Control	2.6	.40*	.53
	Difference	.4		
CES 70	Treatment	3.4		
	Control	2.7	.33*	.43*
	Difference	.7		

CHART I/Cont'd

SCHOOL		MEAN	DIFFERENCE SIGNIFICANT AT THE .05	.01
CES 90	Treatment	2.4		
	Control	2.3	.42	.56
	Difference	.1		
CES 109	Treatment	3.1		
	Control	2.6	.28*	.37*
	Difference	.5		
CES 114	Treatment	2.4		
	Control	2.2	.61	.79
	Difference	.2		
CES 163	Treatment	3.0		
	Control	2.9	.32	.42
	Difference	.1		

Note: *The asterisk indicates the level of significant difference for the larger test score.

TABLE II

ACHIEVEMENT PATTERNS BETWEEN

TREATMENT AND CONTROL GROUPS

GRADE FOUR - 1979

SUMMARY: ANALYSIS OF VARIANCE

SOURCE OF VARIATION	DF	SUM OF SQUARES	MS	SD
Among School Means	17	93.30	5.48	
Within Individuals	703	467.56	.66	.81
Total	720	560.86		

$F = \frac{5.48}{.66} = 8.252$

$t = 8.252 \quad df = 703$

From Table F for

$df_1 = 17, \quad df_2 = 703$

F at .05 = 1.88

F at .01 = 2.39

The analysis of variance of the 1979 reading test scores for the two teacher groups, establishes the fact that a significant difference has been observed among test scores. In fact, the computed F value (e.g., 8.252), is significant at a .01 level. In reviewing the mean scores for the two groups, it is found that the control group has out-scored the treatment group by four months, in grade equivalent units. In fact, when these two scores are subjected to a significance test of mean differences, the control group is significantly higher at a .01 level of significance. It would appear that the evaluation objective for the fourth grade has not been realized.

In order to determine the extent that the overall findings are repeated at the individual schools, a significance test between the mean scores of the

two groups, were computed. These findings are reflected in Chart 2.:

CHART II

TESTS OF DIFFERENCES BETWEEN GROUPS BY USE OF THE t-TEST AT THE INDIVIDUAL SCHOOL LEVEL - 1979 (GRADE 4)

For df = 703, $t_{.05} = 1.96$, $t_{.01} = 2.58$

$$SE_d = .81\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}$$

SCHOOL		MEAN	DIFFERENCE SIGNIFICANT AT THE .05	.01
CES 28	Treatment	3.1		
	Control	3.4	.26*	.34
	Difference	.3		
CES 53	Treatment	3.3		
	Control	3.4	.30	.40
	Difference	.1		
CES 63	Treatment	3.0		
	Control	3.7	.44*	.59*
	Difference	.7		
CES 64	Treatment	2.4		
	Control	3.9	.42*	.55*
	Difference	1.5		
CES 70	Treatment	3.6		
	Control	3.5	.41	.55
	Difference	.1		

CHART II/Cont'd

SCHOOL		MEAN	DIFFERENCE SIGNIFICANT AT THE .05	.01
CES 104	Treatment	3.9		
	Control	3.8	.46	.60
	Difference	.1		
CES 126	Treatment	2.9		
	Control	3.2	.29*	.60
	Difference	.3		
CES 132	Treatment	2.8		
	Control	3.2	.40*	.53
		.4		

Note: *The asterisk indicates the level of significant difference for the larger score.

TABLE III

ACHIEVEMENT PATTERNS BETWEEN

TREATMENT AND CONTROL GROUPS

GRADE FIVE - 1979

SUMMARY: ANALYSIS OF VARIANCE

SOURCE OF VARIATION	DF	SUM OF SQUARES	MS	SD
Among School Means	15	66.17	4.41	
Within Individuals	472	585.82	1.24	1.11
Total	487	651.99		

$F = \frac{4.41}{1.24} = 3.55$

From Table F for

$df_1 = 15$, $df_2 = 472$

F at .05 = 1.71

F at .01 = 2.12

$t = 1.88$ $df = 472$

In observing the above summary table, it has been determined that differences among test scores for the two groups, were signficant at a .01 level. The mean scores for the treatment group (e.g., 3.76), was about a month higher than the control group (e.g., 3.68). The t-test of mean differences between these two groups, does not compute to a significant level (e.g., $p>.05$). It would appear that the evaluation objective for the fifth grade level, has been realized, as observed by the analysis of variance procedure.

In an effort to determine how consistent the over-all findings reflect achievement patterns at the individual school, a test of significant difference was computed for each school. This information is provided in Chart 3., and serves to

highlight specific sites where the program has been significantly more effective than other sites.

CHART I

TESTS OF DIFFERENCES BETWEEN GROUPS BY USE OF THE t-TEST AT THE INDIVIDUAL SCHOOL LEVEL - 1979 (GRADE 5)

For df = 472, $t_{.05} = 1.96$, $t_{.01} = 2.59$

$$SE_d = 1.11\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}$$

SCHOOL		MEAN	DIFFERENCE SIGNIFICANT AT THE .05	.01
CES 28	Treatment	3.8		
	Control	3.8	.58	.76
	Difference	0		
CES 53	Treatment	3.8		
	Control	3.4	.58	.77
	Difference	.4		
CES 64	Treatment	3.6		
	Control	3.5	.56	.74
	Difference	.1		
CES 70	Treatment	3.5		
	Control	3.6	.39	.52
	Difference	.1		
CES 73	Treatment	4.5		
	Control	4.5	.57	.75
	Difference	0		

SCHOOL		MEAN	DIFFERENCE SIGNIFICANT AT THE .05	.01
CES 104	Treatment	4.1		
	Control	3.2	.65*	.86*
	Difference	.9		
CES 109	Treatment	3.5		
	Control	4.3	.62*	.82*
	Difference	.8		
CES 132	Treatment	3.3		
	Control	3.5	.61	.80
	Difference	.2		

Note: *The asterisk indicates the level of significant difference for the larger score.

Objective Three: To assess the degree to which participants are applying those skills, techniques, and methodologies that have been presented to them during the staff development sessions.

H_{R3}: Participants will obtain an F value at a .05 level, that reflects a significantly higher mean score than the non-participants, using the ANOVA procedure.

Findings:

The data, as evidenced by tables and charts under evaluation Objective Two, indicates that this objective has been realized for grades three and five. The findings for the fourth grade indicated a significant F, and a higher mean score for the control group.

Objective Four: To compare the standardized test achievement

rate of pupils in reading, as observed during the Spring of 1978 (pre-test) and Spring of 1979 (post-test).

H_{R4}: A significantly higher rate of achievement will be observed at a .05 level, on the t-test, when participants' mean scores are compared with those of the control group.

TABLE IV

ACHIEVEMENT DIFFERENCES BETWEEN PRE AND POST MEAN READING TEST SCORES

1978 AND 1979

GRADE	GROUP	1978	1979	LEVELS WHERE DIFFERENCES ARE SIGNIFICANT 1978 .05	1978 .01	1979 .05	1979 .01
3	Treatment	1.96	2.76				
	Control	1.86	2.55	.11	.15	.11	.15
	Difference	.10	.21				
4	Treatment	2.57	3.08				
	Control	2.74	3.46	.07*	.09*	.11*	.15*
	Difference	.17	.38				
5	Treatment	3.53	3.76				
	Control	3.35	3.68	.12*	.16	.19	.25
	Difference	.18	.08				

In interpreting Table 4., information is provided that highlights certain characteristics of the achievement data. In those instances where test scores were to the advantage of either group in 1978, they tended to remain so when 1979 scores were observed. This fact was particularly the case with the fourth grade data where the control group maintained a scoring advantage that was significant at a .01 level. In all other grades, the score advantage was with the treatment, though not necessarily significant.

Conclusions and Recommendations

It is the view that sufficient analyses have been performed on the data to indicate that the evaluation objectives have been realized for grades three and five based on program-wide data. While

a significant F has been observed for the fourth grade data, a test of mean differences computed to the advantage of the control group. Because of those observations, it is concluded that the evaluation objective for the fourth grade has not been realized.

Tests of significant difference as performed on the means for the two groups at the individual school level, highlighted specific sites where the program has had the anticipated effect. The analysis also pin-point specific sites where the project hasn't had the effect as reflected by test scores. In such instances, it would be encumbered on the part of the program administrator to critically review possible factors contributing to such findings.

The implications of the findings to the 1979-1980 Staff Development Program, are most critical in light of the fact that those pupils on which the analyses were based, will still be in attendance in these schools. In-sight has been provided regarding the impact of this program on pupil achievement. Hopefully, appropriate review of program operations can be made, so that appropriate modifications can be introduced so that the desired effect of this program, can have the uniform impact across all grades and in all schools.

Recommendations

1. Continued implementation of the Staff Development Program
2. Initiation of this program as early in the school-year as possible.

3. Assessment of the attitudes of participants and non-participants regarding the worthwhileness of such a program.

4. Increase the number of demonstration lessons by teacher-trainers.

5. Increase the articulation between district resource centers, funded program, and the staff development program.

REFERENCES

Henry E. Garrett, Statistics in Psychology and Education, David McKay Company, Inc., New York, 1971.

Wilfrid J. Dixon and Frank J. Massey, Jr., Introduction to Statistical Analysis, McGraw-Hill Book Company, New York, 1957.

D.T. Campbell and Julian C. Stanley, Experimental and Quasi - experimental Designs for Research, Rand McNally College Publishing Company, Chicago, 1966.

John L. Hayman, Jr. and Rodney N. Napier, Evaluation in the Schools: a human process for Renewal Books/ Cole Publishing Company, Monterey, California, 1975.

ROLAND N. PATTERSON
COMMUNITY SUPERINTENDENT

ESEA TITLE I EVALUATION 1978-79

STAFF DEVELOPMENT IMPACT AID QUESTIONNAIRE

NAME: _____ DATE: _____
SCHOOL: _____ PRESENTOR: _____
LICENSE: _____ TOPIC: _____

Teaching Assignment:

PARTICIPANT'S PERCEPTIONS OF DISTRICT # 9 NEW TEACHER WORKSHOPS

The purpose of this questionnaire is to assist in the improvement of instruction in the NEW TEACHER WORKSHOPS. There are no right or wrong answers.

DIRECTIONS FOR ANSWERING QUESTIONS:

Please indicate by check mark your response to the following questions. Note that number 5 indicates the highest level of effectiveness and number 1 the lowest level.

	not adequate 1	minimally adequate 2	somewhat adequate 3	adequate 4	most adequate 5
I PERCEPTIONS AS TO SUFFICIENCY OF CONTENT PRESENTED					
A. Has the sequence of material presented been adequate as to cover all skills necessary in the teaching of reading?	1	2	3 (9)	4 (26)	5 (20)
B. Were all skill areas equally presented?		(3)	(15)	(24)	(22)
II EFFECTIVENESS OF PRESENTOR					
A. Did presentor provide many examples for each skill strand taught?	1	2	3 (4)	4 (22)	5 (41)
B. Did presentor demonstrate adequate preparation for all skills presented?			(4)	(17)	(45)
III PARTICIPANT'S INTERACTION WITH PRESENTOR					
A. Did presentor encourage continous questions by participants?	1	2 (1)	3 (8)	4 (14)	5 (44)
B. Did presentor clarify participant's questions by using several examples?	1	2	3 (9)	4 (16)	5 (40)
IV PRACTICAL APPLICATION OF COURSE					
A. Was material covered in presentation appropriate for use in District # 9 classrooms?	1 (3)	2 (2)	3 (11)	4 (19)	5 (31)
B. Were different approaches suggested for presentation of materials in these classrooms?	(1)	(3)	(11)	(21)	(29)

STAFF DEVELOPMENT IMPACT AID QUESTIONNAIRE

	not adequate	minimally adequate	somewhat adequate	adequate	most adequate
	1	2	3	4	5
V OVERALL EFFECTIVENESS OF PRESENTATION					
A. Would you assess presentation?	1	2	3	4	5
B. Would you assess presentation as good as inferior to or better than others which you have attended?	(1) 1	(8) 2	(20) 3	(30) 4	5

Appendix A

1980 RAMS Summer School Program
COMMUNITY SCHOOL DISTRICT #9

Summer School: _____ Teacher _____ Teacher _____
Reading Mathematics
Teacher's Home School _____ Teacher's Home School _____

ICRT Student Summary Sheet

Student's Name: _____ First Date in Program _____

ID # _____ Last Date in Program _____

Date of Birth _____ Days Present _____

Grade _____ Home School _____ Final evaluation of effort (Circle 1) E S N
If holdover, Test _____ Result _____

Reading	Mathematics
ICRT Pre-test given Yes ___ No ___	ICRT Pre-test given Yes ___ No ___
Sent for computer analysis ___	Sent for computer analysis ___
Evaluated locally, only ___	Evaluated locally, only ___
Printout received ___	Printout received ___
Booklets used _____	Booklets used _____

When printouts are received, enter numbers of 10 non-mastered objectives in table below. Show pre-test status, NR=Need to Review, NL=Need to Learn
If selected objectives are not based on printout, check ( )

Objectives Selected - Reading						Objectives Selected - Mathematics					
Level	ICRT #	NYS#	NR? NL?	Bench Mark Passed	Mastery +/-	Level	ICRT#	NYS#	NR/ NL	Bench Mark Passed	Mastery +/-

As benchmarks are passed, enter a check ✓
If some benchmarks are passed after post-test, double check ✓✓

ICRT Post-test given Yes ___ No ___	ICRT Post-test given Yes ___ No ___
Sent for computer analysis _____	Sent for computer analysis _____
Booklets used _____	Booklets used _____

When printouts are received, indicate mastery (+) or non-mastery (-) for each instructional objective on chart. Mastery of every objective for which benchmark was passed is not expected. At the same time, post-test may show newly achieved mastery of some objectives on which instruction was not provided.

Total # mastered objectives, Pre R _____ M _____ Post- R _____ M _____ Difference R _____ M _____